

# **NAVAL POSTGRADUATE SCHOOL**

## **Monterey, California**



## **THESIS**

**THE RELATIONSHIP BETWEEN  
DEMOCRACY AND NONPROLIFERATION:  
BRAZIL, CHINA, AND THE MTCR**

by

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March, 1997

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NONPROLIFERATION: BRAZIL, CHINA, AND THE MTCR**

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Submitted in partial fulfillment  
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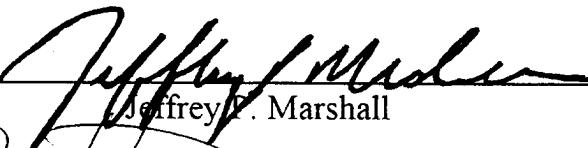
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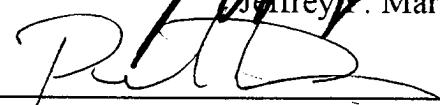
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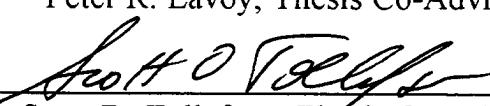
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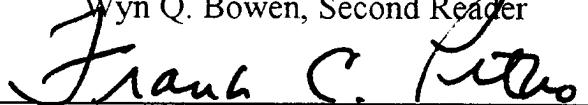
  
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## **ABSTRACT**

This thesis examines the relationship between democracy and membership in the Missile Technology Control Regime (MTCR), a supply-side form of arms control. The thesis uses the focused comparison approach, investigating Brazil (a member of the MTCR) and the People's Republic of China (a non-member). Four independent variables are tested: democratic institutionalization; economic freedoms; norms, values, and beliefs; and elections. These are analyzed in each case and compared to the nation's decision to join the MTCR.

The findings are that democracy, due to the effect of the independent variables, influenced and induced Brazil to join the MTCR; in contrast, the lack of democracy in China inhibits that country from joining. Brazil joined because of public desires for economic and material aid. These pressured the leadership to adhere, thus making the regime more effective. Therefore, the efforts to persuade China to join the MTCR might not succeed until it establishes democracy (including all four variables). This finding suggests that the U.S. National Security policy of "engagement and enlargement" is appropriate.



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## **EXECUTIVE SUMMARY**

Since the end of the Cold War, the proliferation of weapons of mass destruction (WMD) have assumed prominence as the most serious threat against the United States. In particular, ballistic missiles and other unmanned delivery systems are regarded with concern due to the ability of any entity, from nation-state to terrorist group, to obtain, deploy and use missiles to attack or threaten the United States or its allies. The Missile Technology Control Regime (MTCR) is an international effort, among twenty-eight *democratic* countries, to restrict the proliferation of missiles and missile-related technology, accomplished by “supply-side” export controls. In relation to missile technology, each member polices its own commitments, laws, and exports.

This thesis provides two representative case studies in membership/non-membership, Brazil (membership) and China (non-membership), to assess what role democracy plays in the decision of states to join the Missile Technology Control Regime. This study emphasizes that democracy is not only important in a nation’s membership in the regime; this thesis postulates that it is a requirement. Four variables are used to investigate this hypothesis: (1) the impact of economic stability and freedom; (2) governance (i.e., governmental institutions, bureaucracy, rule of law, parties); (3) democratic norms, beliefs, and values; and (4) elections.

The thesis found that democracy is a necessary condition for states to join the MTCR, due to the effect of these four democratic independent variables. This conclusion is because the four variables, combined with export controls, had more of a non-proliferant impact than with export controls alone on a non-democratic nation.

In the Brazilian case, the conclusion was that the effect of the democratic independent variables, combined with external export controls, had more of a non-proliferant impact than with export controls alone. This is because the four independent variables working together enhanced the effect of the export controls by pressuring the newly-elected civilian leadership through the economic policies and through the effect of democratic norms, events, structures and pathways. Thus, the four independent variables facilitated membership in the regime.

In addition, the population's desires for economic growth, improved social conditions, cutting of federal spending, privatization, and public sector reform had more of an impact than the other variables. This is because they influenced the leadership toward membership in the MTCR during the crucial electoral process. This pressure occurred through the democratic pathways and structures, and political institutionalization of democratic governance, and forced the change in the civilian leadership concerning proliferation.

In the China case, domestic and international factors (need for legitimacy; the PLA; extra-governmental businesses that circumvent adherence; Taiwan; desire for resources; and the desire for strategic international and regional influence and stability) favoring non-adherence and non-membership currently influence the PRC's decision to adhere and become a member. In China, the strengthening of the four independent variables (economic stability and freedom; governance; democratic norms, beliefs, and values; and elections), which by definition equate to democracy, would minimize the factors working against membership in the MTCR.

In China, exports would be controlled or policed by rule of law and proper governance. A stronger economy would lessen the impact and need for missile transfers for economic reasons, halting PLA and other Ministries' sales. Elections would legitimize the leadership, resolving their need to

export for nationalist reasons. The benefit of democratic peace would lessen tensions with border states and the United States and curtail the need for technology transfers to offset rivals. This is because the democratic peace is a resultant of a country's acceptance and institutionalization of democratic ideals of self-government, rule of law, and democratic representation of the people. These ideas would curtail aggressive militaristic actions by inducing a questioning authority to counter the leadership. The PLA would decrease authoritarianism in government with democratic institutionalism. Without the combined effect of these variables, democracy would not occur; and by extension without these variables, membership/adherence in the MTCR will not occur.

In contrasting the two case studies, the thesis concludes that the establishing of democracy was a necessary condition for Brazil to join the MTCR. In the Chinese case, the lack of democracy hinders China's ability to join the MTCR.

Based upon my findings, the current U.S. policy of democratic "engagement and enlargement" is therefore the right policy to get other technologically advanced nations to join the regime. It engages the non-democratic nations to become broadly democratic, while never allowing problem issues (arms control, human rights) to poison relations with the United States. Instead, the policy of engagement and enlargement assists in the buildup of institutional structures and the rule of law.



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## I. INTRODUCTION

The proliferation of weapons of mass destruction (WMD) is the most serious threat the United States faces, according to Secretary of Defense William S. Cohen.<sup>1</sup> Potential WMD *delivery systems* are treated just as seriously by the United States and its allies.<sup>2</sup> In particular, ballistic missiles are viewed with concern due to the ability of any entity, from nation-state to terrorist group, to obtain, deploy and use missiles to attack or threaten the United States or its allies. The Missile Technology Control Regime (MTCR) is an international effort to deny the spread of these delivery systems to potentially irresponsible groups.

The MTCR is neither a treaty nor an international agreement; it is a voluntary arrangement among (currently) twenty-eight *democratic* countries that share a common interest in restricting the proliferation of missiles, unmanned air vehicles, and related technology for those systems capable of delivering of a weapon of mass destruction.<sup>3</sup> The

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<sup>1</sup> Clifford Krauss, "G.O.P.'s Cohen Confirmed To Run Defense Department," New York Times, January 23, 1997, p. A10.

<sup>2</sup> U.S. Office of Assistant Secretary of Defense for International Security Affairs (East Asia and Pacific Region), United States Security Strategy for the East Asia-Pacific Region, Washington, D.C.: U.S. Office of International Security Affairs, 1995, p. 20.

<sup>3</sup> Current members are Argentina, Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, The Netherlands, New Zealand, Norway, Portugal, The Russian Federation, South Africa, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The original intent of the regime, as stated at its inception in 1987, was to limit the spread of unmanned nuclear delivery systems, using restrictions on any system capable of carrying any 500 kilogram payload (conventional warhead included), greater than or equal to 300 kilometers (or in the case of a weapon of mass destruction, any distance and any weight). This was modified in January 1993 by expanding the goal of the regime to stemming the proliferation of all Weapons of Mass Destruction (WMD) unmanned delivery systems. The restrictions also extend to any system capable of trading off one restriction for the other. This means that even if a system is under one restriction, if it is able to be modified by lowering its range or weight and thereby meet or exceed the

MTCR seeks to curb missile proliferation through a “supply-side” approach, controlling the transfers of missiles, unmanned air vehicles, and missile-related technologies, in accordance with common guidelines and a technology annex.<sup>4</sup> Due to its voluntary nature, the regime possesses no overarching verification process,<sup>5</sup> with each member policing its own commitments in accordance with its own export laws.<sup>6</sup>

This thesis assesses the role democracy plays in the decision of states to join the Missile Technology Control Regime. In order to analyze this problem, I divide the concept of “democracy” into several constituent parts: (1) economic liberty; (2)

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restriction, it is still controlled. See U.S. Arms Control and Disarmament Agency, “The Missile Technology Control Regime,” <http://www.acda.gov/factshee/exptcon/mtcr96.htm>, November 6, 1996; and Peter van Ham, Managing Non-Proliferation Regimes in the 1990s: Power, Politics, and Policies, New York: Council on Foreign Relations Press, 1994, pp. 24-25; Deborah A. Ozga, “A Chronology of the Missile Technology Control Regime,” The Nonproliferation Review (Winter 1994), p. 67.

<sup>4</sup> One of the difficulties of their control is the interchangeability of missile technology with space launch systems technology. The MTCR is not designed to impede national space programs or international cooperation in such programs as long as such programs do not contribute to delivery systems for WMD. See U.S. Arms Control and Disarmament Agency, The Missile Technology Control Regime (MTCR) Guidelines & Equipment & Technology Annex, Washington, D.C.: June 11, 1996, p. 1.

<sup>5</sup> U.S. Arms Control and Disarmament Agency, “The Missile Technology Control Regime,” <http://www.acda.gov/factshee/exptcon/mtcr96.htm>, November 6, 1996.

<sup>6</sup> The regime delineates the export controls applying to two categories. Category I regulations are those that limit the proliferation of complete, whole missile systems, as well as, major subsystems of the equipment and technology (including technical data and assistance, design, and production capability for complete rocket and missile systems and complete subsystems of rocket stages, reentry vehicles, warhead firing mechanisms, and guidance and control systems). Category II items are given a strong presumption of denial for export, and are therefore rarely accorded licensing for export. Category II regulations control other missile-related components, less sensitive materials that are generally considered dual-use components which can have applications in civilian space-launch systems and aircraft. These items can be licensed for export to other nations as long as they are not destined for an end-use that could contribute to development of a missile within the limitations of the regime. Janne E. Nolan, “Alternative Approaches to Managing Missile Proliferation,” The International Missile Bazaar: The New Suppliers’ Network, Boulder, Colorado: Westview Press, 1994, pp. 281-83; U.S. Arms Control and Disarmament Agency, “The Missile Technology Control Regime;” W. Seth Carus, Ballistic Missiles in the Third World: Threat and Response, London: Praeger Publishers, 1990, p. 89; and Center for International Security and Arms Control, Assessing Ballistic Missile Proliferation and Its Control, Stanford, CA: Stanford University, 1991, p. 119.

democratic governance and rule of law; (3) democratic norms, beliefs, and values; and (4) elections.

The answer to this question is important in determining which democratic factors are most relevant to an applicant's desire for, and acceptance into membership; as well as, being applicable to all prior cases of membership in the MTCR. These factors provide the basis for policy recommendations to the United States and other MTCR members, with regard to states which are desired by the United States or other regime members to join the MTCR, or for those states who possess a desire to join of their own accord.

#### **A. THESIS HYPOTHESIS**

The thesis hypothesis is that democracy is a necessary but insufficient factor for states to join the MTCR. In other words, without democracy a state is not likely to join the MTCR. The exact definition of democracy, and the linkages that must be created for it to exist, are crucially important. Democracy would not exist without economic freedom, democratic governance and rule of law (i.e., relatively stable domestic situation, institutions, bureaucracy, judiciary, and political parties), appropriate democratic norms, beliefs, and values (i.e., personal relationships, learning, motivations, and ideology), and elections (i.e., accountability of the leadership to the people). It is by meeting these criteria for democracy that a nation will be inclined toward becoming a member of the regime.

Additionally, in relation to each other, the factors of economic liberty, and norms, beliefs, and values, have the strongest relative effect on a nation to join the regime, followed by the factor of elections, and lastly, the importance of democratic governance

and rule of law. The stronger relative importance of economic freedom, and norms, beliefs, and values, is due to their impact on the civilian democratic government to force change. These factors pressure the leadership to adhere to nonproliferation and the regime. This popular pressure from the people for change is then felt through elections by the action of proper governance (i.e., actions of the parties, the government institutions, the judiciary, and bureaucracy). These causal relationships explain the secondary importance of these last two factors.

## B. THESIS METHODOLOGY

### 1. Thesis method and case studies

The thesis utilizes the “structured focused comparison method” to compare the missile policies of the Federative Republic of Brazil and the People’s Republic of China.<sup>7</sup> Brazil and China are selected for study primarily because of their differences in membership in the MTCR. Brazil joined the regime in October 1995. China has not joined, however supposedly adheres to the regime. China’s adherence is questionable, due to its sporadic non-compliance with the regime’s full restrictions. The dichotomous nature of the cases (Brazil’s membership versus China’s non-membership) is further exemplified with Brazil’s ongoing consolidation of democracy as opposed to China’s sub-democratic level of liberalization.

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<sup>7</sup> For the rest of the thesis, the Federative Republic of Brazil will be stated as Brazil, and the People’s Republic of China as China or the PRC. Any discussion of the Republic of China will be written as Taiwan or the ROC.

In addition to these comparative benefits with regard to membership, both nations' similar abilities to strategically and militarily eclipse the geographic regions in which they reside serve to additionally promote their selections as case studies.<sup>8</sup> Similarly, in an economic sense, Brazil and China are both eagerly sought by the developed world for their potential markets; as well as, being known for their technological ability to produce and sell rugged, cheap, and simple arms. Politically, both nations desire a greater influence in the world arena. Brazil's desire for greater international influence manifests itself through its desire for a United Nations' Security Council seat, as well as a desire to be seen as a responsible world power. China's desire for international influence is seen through its actions on the world stage, in the United Nations, partly as a result of its impending growth into a regional and Great Power. In addition, both nations are emerging from similar periods of harsh authoritarian government. Brazil emerged in 1985 from military rule. China emerged in 1977 from the lasting effects of the Cultural Revolution, but is still under Communist rule.

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<sup>8</sup> Both nations possess large populations with extensive poverty. Brazil has an estimated 158,740,000 total population, the fifth most populous nation, with an estimated 20 percent in poverty and another 20 percent barely subsisting. China has an estimated 1,190,430,000 total population, the most in the world, and approximately 30 percent in poverty. China and Brazil are nearly the same size (Brazil: 3,286,470 square miles; and China: 3,691,502 square miles), possessing large amounts of natural resources. Brazil possesses vast mineral wealth including iron, quartz, coal, manganese, chromium, industrial diamonds, uranium, and platinum; as well as the ecological resource of the Amazonian rain forest. China possesses an abundance of hydroelectric power, large amounts of coal, petroleum, extensive deposits of iron, tungsten, tin, mercury, magnetite, aluminum, salt, uranium, gold, and zinc. See "Brazil Social Conditions," Political Risk Services CD Rom Database, Syracuse, New York: International Business Communications USA, Inc., 1996; Concise Columbia Electronic Encyclopedia, New York: Columbia University Press, 1994; "How Poor Is China?," The Economist, October 1996, pp. 35-37.

## **2. Thesis structure and organization**

The following two chapters present the two case studies, Brazil and China. In each chapter, the various dimensions of democracy are analyzed as is the country's missile programs and policies, investigating for the influence of the four democratic constituents on membership. The fourth and final chapter presents the democratic factors that were found to be most relevant in the case studies. The last chapter recommends policy for the United States, to induce non-members to join the MTCA.

Prior to exploring the case studies, a brief section is required to examine, define and clarify the four constituents (economic freedom; proper governance and rule of law; norms, beliefs, and values; and elections) which define democracy for the purpose of this thesis.<sup>9</sup> The clarification and defining of these four constituent parts is crucial because they create the theoretical framework for the thesis. It is this framework that is used to investigate the relationships between democracy and a nation's decision to join the Missile Technology Control Regime in the case studies.

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<sup>9</sup> As opposed to factors that make up the actual transition to democracy, the importance of elites, or other factors that make democracy sustainable. See Guillermo O'Donnell, and Philippe C. Schmitter, Transitions From Authoritarian Rule: Tentative Conclusions About Uncertain Democracies, Baltimore, MD: Johns Hopkins University Press, 1993; Jorge I. Dominguez, and Abraham F. Lowenthal, editors, Constructing Democratic Governance: South America in the 1990s, Baltimore, MD: John Hopkins University Press, 1996; Adam Przeworski, editor, Sustainable Democracy, Cambridge: Cambridge University Press, 1995; Larry Diamond, Juan J. Linz, and Seymour Martin Lipset, editors, Politics in Developing Countries: Comparing Experiences With Democracy, Boulder, CO: Lynne Rienner Publishers, 1995; Roderic Ai Camp, editor, Democracy in Latin America: Patterns and Cycles, Wilmington, DE: Scholarly Resources, Inc., 1996; John Higley, and Richard Gunther, editors, Elites and Democratic Consolidation in Latin America and Southern Europe, Cambridge: Cambridge University Press, 1992; Dankwart Rustow, "Transitions to Democracy: Toward a Dynamic Model," Comparative Politics, Volume 2, April 1970, p. 357; Arend Lijphart, Democracy in Plural Societies: A Comparative Exploration, New Haven, MA: Yale University Press, 1977, p. 103; Larry Diamond, "Introduction: Political Culture and Democracy," Political Culture and Democracy in Developing Countries, Boulder, CO: Lynne Rienner, 1994.

## C. THEORY

### 1. Factors defining democracy

The theoretical framework used in this thesis constitutes four independent variables that in combination are incorporated from the theoretical literature on democracy. A combined approach is required because the existing theories create an incomplete picture of what makes up democracy, when used individually. The exclusive use of one constituent of democracy would also make it difficult to specify the exact linkages between democracy and membership. This difficulty is due to the fact that the individual theoretical perspectives identify different factors (independent variables) of what makes up democracy. As a result, focusing on one constituent of democracy would therefore limit this investigation as to why states join the MTCR (the dependent variable). The purpose of this section is to define the four constituents and the dependent variable, as well as build the theoretical framework used for this research.

#### a. *Electoral democracy*

The factor of elections can be attributed to minimalist definitions of democracy, namely Joseph Schumpeter's concept of democracy. His construct defined elections as the essence of democracy; a system "for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote."<sup>10</sup> This definition of elections is used in this research.

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<sup>10</sup> This minimalist perspective can also be defined as "electoral democracy." See Larry Diamond, "Is the Third Wave Over?," Journal of Democracy, Volume 7, Number 3, July 1996, p. 21.

## b. *Governance*

The second factor of democratic institutions promote the ideals of political rights and civil liberties, or as defined elsewhere, “liberal democracy.”<sup>11</sup> This concept of democracy requires not only extensive “minimalist” political competition and participation but also substantial levels of freedom and pluralism that enable people to form and express their political preferences.<sup>12</sup> The concept of democratic “governance” builds on this to include the ideals of a rule of law.

Governance is described as a situation in which civil liberties are guaranteed by law; government is representative, accountable and powerful; bureaucracy is rational, rule-bound, merit-based, and subject to control by elected officials (so it is accountable to the people); and the government ensures some dispersal of economic resources.<sup>13</sup> Governance also specifies civilian control of the military in which the military is subordinated to the popularly-elected civilian leadership.<sup>14</sup> This thesis utilizes the

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<sup>11</sup> The most influential definition of liberal democracy is Robert Dahl’s concept of “polyarchy”. See Larry Diamond, p. 21; and Shannon Mattiace, and Roderic Ai Camp, “Democracy and Development: An Overview,” Democracy in Latin America: Patterns and Cycles, Roderic Ai Camp, editor, Wilmington, DE: Scholarly Resources, Inc., 1996, p. 6. Freedom House in its comparative surveys define the term “electoral democracy” as “partly free democracies,” referring to democracies that are democratic in form but less in substance, meaning political rights and civil liberties; other names used have been “semi-democratic” or “formal democracy.” See <http://www.freedomhouse.org/Political/method.htm>.

<sup>12</sup> These ideas are stated in Dahl’s eight requirements for democracy: freedom to form and join organizations; freedom of expression; right to vote; right of political leaders to compete for support; alternative sources of information; eligibility for public office; free and fair elections; and institutions for making government policies depend on votes and other expressions of preference. See Robert A. Dahl, Polyarchy: Participation and Opposition, New Haven, CT: Yale University Press, 1971, p. 3.

<sup>13</sup> The concept of “governance” is from Valerie Bunce’s concept of the democracy. See Shannon Mattiace, and Roderic Ai Camp, “Democracy and Development: An Overview,” Democracy in Latin America: Patterns and Cycles, p. 6.

<sup>14</sup> One can argue that this might deserve to be a separate variable, however, by incorporating the concepts of institutional democracy, rule of law, bureaucracy, and parties into governance. This should

concept of governance (with the rule of law, and appropriate democratic rights, liberties, structures, and institutions) to describe the second facet of democracy.

**c. *Political Culture***

The concept of values, norms, and beliefs is the third facet of democracy. These three ideas (also referred to as a nation's "political culture"), are used to describe the public's predominant beliefs, attitudes, values, ideals, sentiments, and evaluations about the political system of their country, and the role of the self in that system, their inclination toward political action and their political system in general.<sup>15</sup> The linkage between these values, beliefs, and norms, and the concept of democracy is that the political culture of a state matters, and can influence the political structures, coalitions, political behavior, policy, and development of the country.<sup>16</sup> This definition of political culture is utilized for the third facet of democracy.

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cover proper civilian control over the military. Terry Lynn Karl's idea of the importance of proper civilian -military relations. *Ibid.*

<sup>15</sup> Some of the earliest descriptions of this normative approach to the structure of democracy originate with Gabriel A. Almond and Sidney Verba. They summarized these three factors into three orientations: a cognitive orientation, involving knowledge of and beliefs of the system; an affective orientation, feelings about the system; and an evaluational orientation, commitments to political values and judgments about the performance of the system relative to those values. See Gabriel A. Almond, and Sidney Verba, The Civic Culture: Political Attitudes and Democracy in Five Nations, Princeton, NJ: Princeton University Press, 1963, p. 15; and Larry Diamond, "Introduction: Political Culture and Democracy," Political Culture and Democracy in Developing Countries, Boulder, CO: Lynne Rienner, 1994, p. 8.

<sup>16</sup> This is due to effect of the leadership remaining constant to, and abiding by these causal legal and public norms. In turn, the leadership receive legality and legitimacy (other forms of norms, values, and beliefs), thereby strengthening democracy. Thus, leaders, while abiding by this political culture, strengthens the culture and the institution of democracy itself. See Thomas Risse-Kappen, "Public Opinion, Domestic Structure, and Foreign Policy in Liberal Democracies," World Politics, Volume 43, July 1991, pp. 510-12; and Yossi Shain, and Juan J. Linz, "The Role of Interim Governments," Journal of Democracy, Volume 3, Number 1, January 1992, p. 74. Another example of the effect of norms, values, and beliefs (in addition to governance) is the democratic peace; the belief that democratic states do not fight each other. This outcome of democratic norms, values, and beliefs is plausible based on the underlying principle of democracy, that disputes can be resolved without force through democratic political processes that in some balance ensure both majority rule and minority rule without violence or

#### **d. Economic freedom and influences**

The fourth facet of democracy is the importance of economic freedom. This means that democracy has been made possible by a certain level of economic freedom and development,<sup>17</sup> and without which democracy would not be stable and would falter.<sup>18</sup> The theoretical structure of this concept is assumed by the relationship of growing wealth to democracy. This economic theory of democracy specifies that as wealth increases, it is accompanied by increased education, graduated autonomy in business and some government institutions. The improvements in institutions (governance), wealth, and education foster the growth of democratic attitudes (political culture). It is this growth in political culture that fosters and nourishes democracy.<sup>19</sup> The thesis utilizes this definition of the linkages between economic liberty and democracy for the investigation.

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violation of one's rights. This norm of equality applies across state boundaries toward other democracies, since those in one democracy will respect and allow others their own right of self-determination, if they are perceived as a democracy. This does not apply to non-democracies. The democratic peace is also attributed to the impact of *governance* or, in other words, the structural and institutional influences in a democracy. This factor is due to the constraints that these two variables have on a state's ability to go to war, i.e., the difficulty of democratic leaders to move their countries into war due to public opinion, bureaucracies, legislatures, and interest groups, who must be persuaded to fight. According to this theory, the impact of these factors are accentuated with regard to other democracies in deterring war, which means the democratic institutions and political culture moderate the warlike attributes of states. See Bruce Russett, Grasping the Democratic Peace: Principles for a Post-Cold War World, Princeton, NJ: Princeton University Press, 1993, pp. 31-33, 38-39, 40-41.

<sup>17</sup> Samuel P. Huntington, The Third Wave: Democratization in the Late Twentieth Century, p. 316.

<sup>18</sup> This level of development has been quantified, suggesting that the transition to stable democracy correlates to mean incomes between \$5000 and \$6000, and becomes indestructible at the \$7000 level. See Adam Przeworski, Michael Alvarez, Jose Antonio Cheibub, and Fernando Limongi, "What Makes Democracy Endure?", Journal of Democracy, January 1996.

<sup>19</sup> Henry S. Rowen, "The Short March: China's Road to Democracy," The National Interest, Number 45, Fall 1996, pp. 68-69.

## **2. Thesis theoretical framework**

Utilizing the four facets of democracy discussed above, this thesis utilizes four independent variables that in combination incorporate the above theories. The independent variables are:

- 1) the importance of elections,
- 2) a nation's governance and rule of law,
- 3) a nation's political culture (norms, values, and beliefs),
- 4) the degree and influence of economic freedom.

Comparing the impact of each independent variable separately, and together with the other variables, allows one to answer the research question: "What role does democracy play in the propensity of states to join the Missile Technology Control Regime?"

This causal relationship between the independent and dependent variables is explained in Figure 1.

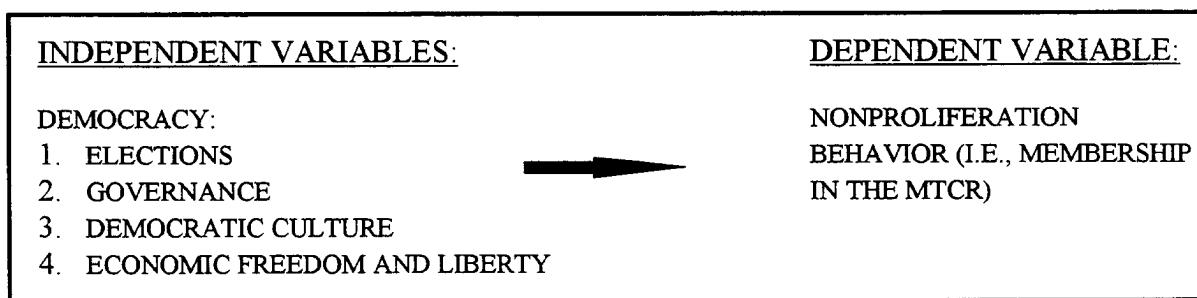


Figure 1. Causal relationship between democracy and nonproliferation behavior.

In addition to the necessity of all four independent variables for membership, the relative importance of each is also relevant, for it is this relative importance that can be

used to focus and target national policy guidelines, enabling the United States to influence a nation's membership. The factors of economic freedom and political culture have the strongest relative effect in a democracy. These causal variables have the strongest effect due to the direct influence of the two variables on the civilian leadership, especially during elections. This causation is a result of the fact that the leadership can be voted from office if their policies do not adhere to the desires of the people. This influence of the people through elections is made known to the leadership and facilitated through the institutionalization of governance.

Therefore, the primary causal independent variables apply pressure to the leadership through the execution of the secondary independent variable, open and free elections. The pathways through which the pressure is applied and through which the elections are held (the government institutions and political parties) are the tertiary independent variables. Additionally, proper national adherence to the resultant laws or policies is achieved through the influence of the rule of law, and the civilian-led government institutions that are charged with carrying out those policies.

These relationships can be seen in Figure 2.

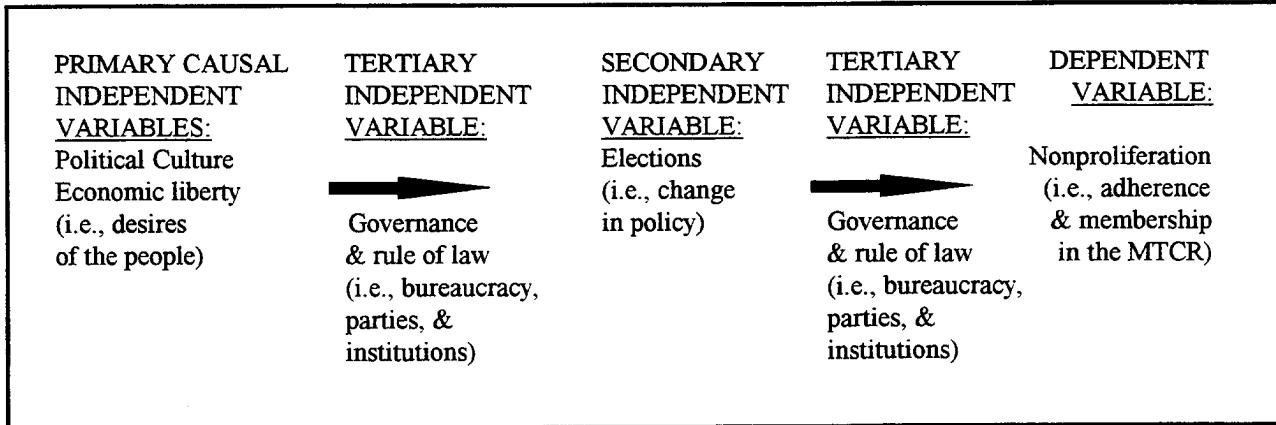


Figure 2. Causal relationships between independent variables.

In the above diagrams, it is assumed that the dependent variable is nonproliferation/membership in MTCR. To clarify the opposing degree of membership in the case studies, though, the exact definition of the dependent variable needs to be refined, just as the independent variables were delineated. The dependent variable is defined as the propensity of states to join the Missile Technology Control Regime.<sup>20</sup> For the purposes of this thesis, the concept of “joining” the MTCR revolves around the idea of membership. This idea of membership includes: those states that either joined at the inception of the regime, or later submitted applications that were approved for membership. Further, for the purpose of this research, a nation that has “joined” will include those nations that have undergone the recruitment process, aligned their indigenous export policies to those specified in the MTCR, effectively enforced these export laws to the satisfaction of the

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<sup>20</sup> The actual member states, who were cited earlier, are those that have either joined the regime at inception in 1987 (the Group of Seven nations), later submitted applications that were approved for membership, or were directly recruited by the regime for inclusion. Official adherents are those that are not official members but have signed a Memorandum of Understanding with the United States to adhere, these include: Ukraine, People’s Republic of China, and Israel. Unofficial adherents are those nations that have stated their desire to abide by the regime, for example, Pakistan. See Deborah A. Ozga, “A Chronology of the Missile Technology Control Regime;” and U.S. Arms Control and Disarmament

regime, and effectively curtailed any proliferation that is controlled by the limits of the regime.

The importance of including those who have *fully* abided by the regime's regulations in their actions but have not been "officially" inducted as a member is pertinent when investigating those nations which have been stated as "official adherents" (i.e., Israel, People's Republic of China and Ukraine), or which have declared on their own to be "adherents" (i.e., Pakistan), but do not abide by the regime's full restrictions (i.e., People's Republic of China and Ukraine). This delineation between those nations who have fully complied, and those who have not, enables the research to clarify which nation is interested in joining, and which is not. Finally, this "stretching" of the actual definition of "joining" the MTCR, enables one to investigate a possible situation where a prospective member has fully complied with the regime (in written laws and actions) but whose full acceptance as a member has been held up for political or economic reasons by an already sitting full member, or by another prospective member.

### **3. Thesis hypothesis revisited with regard to factors defining democracy**

The purpose of this section is to revise and clarify the thesis hypothesis, that "without democracy a state is not liable to be a MTCR member," by including the four democratic independent variables. This is necessary to explain the causal nature of each of these four variables on the dependent variable, membership in the regime.

The influence of political culture is crucial to membership. The needs and desires of the people for economic assistance and for international respect and recognition for

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Agency, "The Missile Technology Control Regime," <http://www.acda.gov/factshee/exptcon/mtcr96.htm>,

their country are the causal factors that move the civilian leadership in a certain policy direction. The public's desires are expressed to the leadership only if the people believe in democracy. This is because it is only through their participation and belief in their own representation in government that the civilian leadership will respond to their needs. Thus, the values, beliefs, and norms of the population positively influence a nation's membership in the regime through the electorate's actions.<sup>21</sup>

Economic liberty, freedom and openness is also crucial to membership. The impact of economic freedom lessens the economic impact of a halt to missile proliferation, and impacts on the leadership through the desires of the people for improved economic and material conditions. This is because economic freedom and openness diversify the marketplace, which in turn lessen the economic need for proliferation. In addition, the economy provides linkages between internal actors, and from internal actors to external actors through the economy's requirement for availability for information, technology, loans, and international trade. This requirement for information promotes the strength of democracy, and positively influences membership in the MTCR (by allowing current members to check on the ability of the prospective member to curtail proliferation, and allowing the government to police itself according to its own indigenous export laws). The need for international technology, loans and trade, additionally, provides an incentive

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November 6, 1996.

<sup>21</sup> The positive nature of the relationship versus a negative causal relationship is due to the impact of economic pressures on the population. In a democracy, the mass of the people favor government assistance to the needy and equality to all citizens. This manifests itself in less desire by the people for government-sponsored companies and proliferation, which results in a sensitivity by the leadership to nonproliferation and economic issues.

for nonproliferation. This incentive is due to the leverage that these factors give to nonproliferating nations, when denying their access to proliferating nations.

The influence of governance is also crucial to membership. Democracy's basis of governance positively influences the applicability and effectiveness of the legal structures for self-policing of indigenous export laws that are required for membership. The pressures of the population are also carried through these institutions, bureaucracies and parties to influence the leadership in a positive direction with regard to membership, and thus serve as "democratic pathways" for the desires of the people.

The necessity of elections in a democracy is also crucial to a nation's membership in the regime. This necessity is due to the fact that the civilian leadership is desirous of legitimacy and re-election. This legitimacy and continued mandate is gained through political stability, respected international standing, and continued economic growth, in accordance with the people's desires. These factors are positively enhanced through a nation's membership in the MTCR. Membership fulfills these needs of the civilian leader, through international prestige, access to development loans and assistance for economic growth.

## **II. CASE STUDY: BRAZIL**

The purpose of this chapter is to investigate the influence of democracy on Brazil's decision to become a member of the MTCR. The chapter begins by investigating the recent re-emergence of Brazilian democracy, as well as the history of Brazil's membership in the MTCR. Following these two sections, the impact of the four independent variables are analyzed with regard to the decision to become a member. The chapter concludes that pressure on the newly-elected, and receptive, civilian leadership led to membership in the regime. This pressure came indirectly from the citizens, through the electorate's mandate for economic improvement, improved domestic conditions, and privatization. The people's mandate expressed through their electoral voting for national leader and platform induced the leadership to join the regime. These popular views were channeled through the institutions and parties.<sup>22</sup>

### **A. BACKGROUND**

#### **1. History of democracy in Brazil**

Since 1985 Brazil has undergone a period of re-democratization. The military government (1964-1985) lost legitimacy in part because of its failure to maintain economic

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<sup>22</sup> This domestic pressure resulted from citizen participation in the democracy, taking the form of citizen demands for economic assistance, and an improved international standing. These could only be easily achieved through nonproliferation. The economic desires were combined with an equal desire by the population and leadership for citizen control of the government and military. This desire for proper civil-military relations manifested itself through a curtailing of government development of nuclear and non-nuclear weapons. The effect of the citizen desires were transmitted and the military subordinated through the efforts of political parties and democratic institutions.

growth. The liberalization process began in 1974, through the processes of “distensão” (decompression of authoritarian rule) and later through “abertura” (political opening).<sup>23</sup>

The re-democratization process was solidified with the complete transition of power to a civilian, popularly-elected government in 1989, when Fernando Collor de Mello won the first direct presidential election in Brazil in 29 years.<sup>24</sup>

The democratic process was further tested and refined in 1992 with the impeachment and resignation of President Collor,<sup>25</sup> and the subsequent transfer of power to Vice President Itamar Franco. This legitimate and democratic transition illustrates the strength of its 1988 Constitution, the legislature and bureaucracy, as well as Brazilian rule of law. The second direct presidential election occurred in 1994. This resulted in the victory of current president, Fernando Henrique Cardoso, who was inaugurated in January 1995.<sup>26</sup> The current political system exists in accordance with the Constitution, with

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<sup>23</sup> Ronald M. Schneider, Brazil: Culture and Politics in a New Industrial Powerhouse, Boulder, CO: Westview Press, 1996, p. 95.

<sup>24</sup> In the 1989 elections, the political climate was marked by economic deterioration, near hyperinflation, and an erosion of political legitimacy and credibility. President Collor ran on a platform of market-oriented liberalism tempered with moderate social democratic principles. The main opposition candidate, who won enough votes in the first round of elections to compete in the second round, was Luis Inacio Lula da Silva, from the Workers' Party. He ran on a leftist platform of economic, social, and political equality. Lula's party was based on a nationalist, socialist platform, aimed to eradicate all privileges and eradicate capitalism. In the first round Collor won 28.5 percent to Lula's 16.1 percent, in the second, Collor won the Presidency with 50 percent, to Lula's 44.2 percent. See "What is the PT, the Workers' Party of Brazil?", <http://www.pt.org.br/what.htm#platform>; Scott Mainwaring, "Brazil: Weak Parties, Feckless Democracy," Building Democratic Institutions: Party Systems in Latin America, Stanford, CA: Stanford University Press, 1995, p. 373; Ronald M. Schneider, Brazil: Culture and Politics in a New Industrial Powerhouse, pp. 114-15.

<sup>25</sup> This impeachment was due to charges of corruption.

<sup>26</sup> Cardoso won the Presidency on October 4, 1994 by winning 54.3 percent of the vote, to Luis Inacio Lula da Silva's 27 percent of the vote. Cardoso ran on a platform of economic liberalism, monetary stabilization, and market-oriented reforms. Lula presented a leftist nationalist platform, favoring economic, social, and political equality. See "Elections In Brazil," <http://www.universal.nl/users/derksen/election/brazil.htm>; and Bolívar Lamounier, "Brazil: Inequality

separate executive, legislative, and judicial branches, and the existence of dozens of political parties.<sup>27</sup> The question that interests us is whether, and to what extent, democracy in Brazil influenced the country's desire to join the MTCR.

## **2. History of Brazil's membership in the MTCR**

The history of Brazil's MTCR membership originates with international pressures brought to bear on the military governments and the José Sarney administration (1985-1990).<sup>28</sup> Those pressures peaked against the Collor administration following the Iraqi invasion of Kuwait. This pressure was due to concerns regarding the presence of a Brazilian company in Iraq assisting in the Iraqi missile program.<sup>29</sup> This international interest was especially acute because the owner of the company was a retired Brazilian Air Force Major General, Hugo de Oliveira Piva. Some accused Piva of transferring sensitive Brazilian technology to Iraq. The missile technology had been developed with Brazilian taxpayer money, and transferred without official permission. This transfer was especially

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Against Democracy," Politics in Developing Countries: Comparing Experiences with Democracy, Boulder, CO: Lynne Rienner, 1995, p. 163.

<sup>27</sup> U.S. Department of State, Bureau of Public Affairs, "Background Notes: Brazil," March 1995, gopher://dosfan.lib.uic.edu:70/0F-1%3A22622%3ABrazil%2C%203/95.

<sup>28</sup> Sarney was the civilian Vice President who assumed the Presidency after President-elect Tancredo Neves passed away. He therefore was not directly elected by the people and did not possess the mandate or full legitimacy that Neves had enjoyed.

<sup>29</sup> This company, HOP Industries, was assisting the Iraqis to increase the range of their indigenous Scud missiles, from 270 kilometers to 600 kilometers. In addition, the company was also working in Iraq to produce a version of the Piranha air-to-air missile. See "Extending Missile Range," EFE (Madrid), February 6, 1991, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>; "PIRANHA-TYPE Missile Technology," VEJA (Sao Paulo), May 16, 1990, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>, p. 53; and "Firm 'May Have' Sold Missile Technology To Iraq," Rede Globo Television (Rio De Janeiro), January 3, 1992, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>.

important because even without authorization, it was still perfectly legal.<sup>30</sup> The international pressure came in the form of a placement of export controls against Brazil. These controls limited space launch and other missile-relevant advanced technologies, technical expertise, and overseas investment.<sup>31</sup>

As a result of the international pressure and the domestic concern from the press, the electorate, and the Congress, President Collor was prompted to propose legislation against such transfers. This legislation proposed government control over the export of dual-use services by citizens and private companies.<sup>32</sup> The initial legislation, known as the Piva Law, was approved in 1991. It effectively closed the loophole utilized by Piva.

Further pressure from other countries, particularly the United States, to halt continued technology transfers to Brazil, resulted in an additional export control bill being introduced in the Brazilian legislature in February 1992. This was halted, though, with the

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<sup>30</sup> Clifford P. Graham. "The Technological Imperative: A Brazilian Perspective on Dual-Use Technology," Gary K. Bertsch, Richard T. Cupitt, and Steven Elliot-Gower, editors, International Cooperation on Nonproliferation Export Controls: Prospects for the 1990s and Beyond, Ann Arbor, MI: University of Michigan Press, 1994, p. 235-36.

<sup>31</sup> Despite these controls, in 1989 France strongly considered exporting rocket motor technology to Brazil, along with the dispatch of rocket experts to assist in production. The sale was only halted after U.S. pressure. In August 1990 the U.S. then seemingly violated the controls by allowing the re-export of seven Brazilian rocket motor casings. These had been previously shipped to the United States for thermal treatment, and were allowed after a review of their export license in terms of MTCR compliance in May 1990. See U.S. Department of State, "U.S. Heat Treatment of Brazilian Rocket Motors," Washington, D.C.: December 24, 1990, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>; "Ministry States Policy," Le Quotidien De Paris, October 7-8, 1990, p. 14, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>; Michael R. Gordon, "U.S. Tries To Stop Brazil's Missile Technology Deal," New York Times, October 19, 1989, p. A6, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>; "U.S. Release Of Rocket Motor Casings Reported," O Estado De Sao Paulo (Sao Paulo), September 8, 1990, p. 9, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>; and Deborah A. Ozga, "A Chronology of the Missile Technology Control Regime," The Nonproliferation Review (Winter 1994), <http://cns.miis.edu/db/msl/chrono/mtcr.m4>.

<sup>32</sup> Patrice Franko-Jones, The Brazilian Defense Industry, Boulder, Colorado: Westview Press, 1992, p. 4; and Ronald M. Schneider, Brazil: Culture and Politics in a New Industrial Powerhouse, Boulder, Westview Press, 1996, p. 114-15.

impeachment of President Collor in the spring of 1992. It is important to note that the halting of the transfer of Brazilian sensitive technology to Iraq was especially remarkable. This is because this last severing of trade resulted in the virtual collapse of the Brazilian company of ENGEZA, which had been stumbling since 1988 and the end of the Iran-Iraq war. AVIBRÁS was also hurt.

In February 1994, in keeping with his predecessor's legacy, President Franco began addressing international and existing MTCR member concerns about civilian controls. This began with the establishment of the Agencia Espacial Brasileira (AEB - Brazilian Space Agency). It instituted civilian control of the space program, and replaced the military-controlled Comissão Brasileira de Atividades Espaciais (COBAE - Brazilian Commission of Space Activities). The AEB is responsible for the coordination of all ministries involved in the Missão Espacial Completa Brazileira (MECB - Brazilian Complete Space Mission).<sup>33</sup> President Franco additionally announced Brazil would abide by the MTCR. He stated that Brazil's intention was to join in the regime in the future, for the purpose of getting access to banned advanced technology.<sup>34</sup> This was underlined by

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<sup>33</sup> Jayme Brener and Antonio Novaes, "Space Agency Head On US Proliferation Concerns, MTCR," Isto É, March 13, 1994, p. 75; and José Monserrat Filho, "The new Brazilian Space Agency: a political and legal analysis," Space Policy, May 1995, p. 125.

<sup>34</sup> The access to the banned technology (i.e., vehicle guidance systems, propulsion, sensors, special materials, electronics, and computers items) was imperative for Brazil to develop its own indigenous satellite launch vehicle (VLS), and for the establishment of a spaceport near the equator at Alcântara. This desire for a Brazilian launch vehicle was important for economic reasons, to partake of international space launch business, as well as associated development benefits. Therefore, the country couldn't get required imports without giving up its missile exports and technology transfers. The answer was to adhere to the regime. It has been proposed that the required technologies would reduce the cost of the VLS by 30 percent, equating the cost to as little as \$7 million per launch. To further illustrate this, the United States had already allowed technology transfers to Spain, Australia, and Italy since they were members of the MTCR, and it could be expected to do the same with Brazil, once it became a member. See Ian Simpson, "Brazil To Meet Standards On Missile Technology," Reuter, February 11, 1994; Wyn Bowen and Andrew Koch, "Non-Proliferation Is Embraced by Brazil," Jane's Intelligence Review,

Brazil's decision in December 1994 to control trade in missile-related goods and services in conjunction with existing laws and mechanisms.<sup>35</sup> These controls simply awaited the approval of an indigenous export control bill.<sup>36</sup>

In addition to the impact of MTCR export controls, improved relations with Argentina assisted to persuade Brazil to adhere to the regime.<sup>37</sup> This improvement in relations stemmed from joint nuclear nonproliferation rapprochement. This in turn was the result of domestic budgetary concerns and a joint Argentine-Brazilian desire to curb indigenous military influence and control. The Argentineans assisted this decision with the cessation of their own Condor II ballistic missile program.

Concurrently, other Brazilian domestic concerns pressured the leadership for adherence. This took the form of a pursuit for international legitimacy, manifested in Brazil's desire to be a space power. In particular, this desire fueled the need for a space

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Volume 8, Number 6 (June 1996), p. 284; The RISK Report: Tracking Weapons of Mass Destruction, Volume 1, Number 3, April 1995, p. 6; and Philip Finnegan, "Foreign Technology May Cut Brazil Launch Vehicle Costs," Defense News, March 11-17, 1996, p. 26.

<sup>35</sup> Despite this decision, there is some discussion as to whether Brazil had fully adhered to the regime because it was discovered in May 1995 to have received advanced missile technology from Russia for the VLS. President Clinton waived the economic sanctions against Russia and Brazil that were required by a 1990 United States law. The decision to not levy sanctions was made after Russia "promised to stop" sales to Brazil. It was also seen as an effort to encourage Brazil to become a full MTCR member. This is interesting since this shows a change in U.S. Government policy, from *using* sanctions to stop proliferation, to *waiving* these same sanctions to stop proliferation. Despite this apparent change, it has been predicted that Brazil's membership and promise of safeguards will not halt proliferation, only retard its growth. See Brian G. Chow, Emerging National Space Launch Programs: Economics and Safeguards, Santa Monica, CA: RAND, 1993, p. 66; R. Jeffrey Smith, "U.S. Waives Objection to Russian Missile Technology Sale To Brazil," Washington Post, June 8, 1995, pp. A23, A27; and Warren Foster, "Russia Did Not Violate MTCR, Official Says," Space News, June 12-18, 1995, p. 12.

<sup>36</sup> Wyn Bowen and Andrew Koch, "Non-Proliferation Is Embraced by Brazil," Jane's Intelligence Review, Volume 8, Number 6 (June 1996), p. 284.

<sup>37</sup> Jose Goldemberg and Harold A. Feiveson, "Denuclearization in Argentina and Brazil," Arms Control Today, March 1994, p. 13; and Wyn Bowen and Andrew Koch, "Non-Proliferation Is Embraced by Brazil," Jane's Intelligence Review, Volume 8, Number 6 (June 1996), p. 284.

launch vehicle, the VLS. This endeavor put pressure on the government to adhere to the MTCR, thereby obtaining the crucial technologies.<sup>38</sup>

President Cardoso continued the MTCR membership process, following the nation's second presidential election. He stated his commitment to nonproliferation in August 1995, proclaiming "Brazil no longer possesses, nor does it produce or intend to produce, to import or to export long-range military missiles capable of carrying weapons of mass destruction."<sup>39</sup> As a result, on October 5, 1995, the Brazilian Senate enacted the final measure needed to assure Brazil's adherence to the Missile Technology Control Regime. This approval of President Cardoso's Export Control Law #9112, gave the Strategic Affairs Secretariat (SAE) authority to penalize firms that breach export controls for dual-use technologies. This included missile-related goods and services.<sup>40</sup>

As a result of these consistent efforts by Presidents Collor de Mello, Franco, and Cardoso in curbing technology transfers, ensuring punishment for violations, and the

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<sup>38</sup> In addition to Brazil's desire to be legitimized as a space power, it also possesses a desire for a seat on the United Nations Security Council. This manifests itself through its adherence and membership to the regime. The belief is that membership will satisfy the requirements for Brazil to be seen as a regional power and peacemaker. See Wyn Bowen and Andrew Koch, "Non-Proliferation Is Embraced by Brazil," Jane's Intelligence Review, Volume 8, Number 6 (June 1996), p. 284; and Warren Ferster, "Brazil Relishes Freedom as MTCR Member," Space News, October 30 - November 5, 1995, p. 1.

<sup>39</sup> Fernando Henrique Cardoso, "Space for Peace Not War," Defense News, September 18, 1995, p. 32.

<sup>40</sup> The penalties range from warnings and fines to removal of export privileges and imprisonment. See Wyn Q. Bowen, "Brazil's Accession to the MTCR," The Nonproliferation Review, Spring-Summer 1996, p. 88. In addition to the MTCR, other efforts were enacted: the Mendoza Declaration, focusing on chemical and biological weapons; and the Treaty of Tlatelolco, establishing a nuclear-weapon-free zone in Latin America and the Caribbean; see Wyn Bowen and Andrew Koch, "Non-Proliferation Is Embraced by Brazil," pp. 283-87.

subordination of Brazil's space program to civilian control, Brazil officially became a member of the MTCR on October 11, 1995.<sup>41</sup>

## **B. THE RELATIONSHIP BETWEEN ELECTIONS AND MEMBERSHIP IN THE MTCR**

The influence of elections on membership in the regime is interesting due to the fact that Brazil's initial steps toward membership began with the election of President Collor and the re-establishment of civilian government. His election is the single most important event associated with Brazil's change of policy toward restrictions on dual-use technology.<sup>42</sup> His predecessor, José Sarney, had been indirectly elected president, and was less willing to counter the military in its efforts to develop missiles. The factor of elections is important because the election victor, President Collor, became a catalyst for movement in a nonproliferative direction.

President Collor induced this movement partly due to the effect of international sanctions/export controls. These sanctions stemmed from international pressures for nonproliferation to Iraq during the Persian Gulf War.<sup>43</sup> President Collor's positive response to these international pressures, which were partly accentuated by Brazil's newly energized and unsuppressed domestic press, professional groups, and legislature, led to

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<sup>41</sup> Wyn Bowen, "Brazil's Accession to the MTCR," p. 88; and "Missile Technology Control Regime Holds Plenary Meeting In Bonn," Missile Technology Control Regime, 1995.

<sup>42</sup> Clifford P. Graham. "The Technological Imperative: A Brazilian Perspective on Dual-Use Technology," Gary K. Bertsch, Richard T. Cupitt, and Steven Elliot-Gower, editors, International Cooperation on Nonproliferation Export Controls: Prospects for the 1990s and Beyond, Ann Arbor, MI: University of Michigan Press, 1994, p. 233.

<sup>43</sup> Brazil is a traditional purchaser of Brazilian weapons and technology. Ibid.

movement toward nonproliferation.<sup>44</sup> This movement resulted in initiatives to assert civilian control over Brazil's dual-use technology programs, by removing military officers from decision making centers not associated with defense, and by shrinking the number of personnel involved in intelligence and security issues.<sup>45</sup> All these tasks are ones that the military governments or the Sarney government would presumably not have accomplished.

Domestically, elections allowed the electorate to choose the President. This ability to choose permitted the masses to elect President Collor, who ran on a platform of market-oriented liberalism tempered with moderate social democratic principles. His policies specifically focused on the privatization of state-owned enterprises, curbing government spending, and reducing the role of the state in economic life.<sup>46</sup> President Collor's platform also called for increased foreign investment and technology, while promising to reform the government budget.<sup>47</sup> Collor's platform targeted the expansive military budget, with its associated arms industries. The platform, by focusing on the military budget, sought to redirect fiscal expenditures to non-military needs.

The election of President Collor, therefore, provided a mandate for the culling of non-productive state-owned, or government-supported nuclear and conventional arms

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<sup>44</sup> The Brazilian Physics Association was one such professional group (composed of numerous Brazilian physicists) which forwarded a report to Congress on the lack of civilian supervision of the military nuclear program. This supervision from the Congress had been mandated in the 1988 Constitution. *Ibid.*, p. 231.

<sup>45</sup> This change was most dramatically observed with the opening and subordination of the military's secret nuclear program under civilian control, when he personally began the dismantling of the military's nuclear test site in Cachimbo, as well as his promise before the United Nations and to Argentina that Brazil will not develop nuclear weapons. See Clifford P. Graham. "The Technological Imperative: A Brazilian Perspective on Dual-Use Technology," p. 235.

<sup>46</sup> Ronald M. Schneider, Brazil: Culture and Politics in a New Industrial Powerhouse, pp. 114-15.

industries. The results of this mandate can be seen, in Figure 3, showing military expenditures before and after Collor's election.

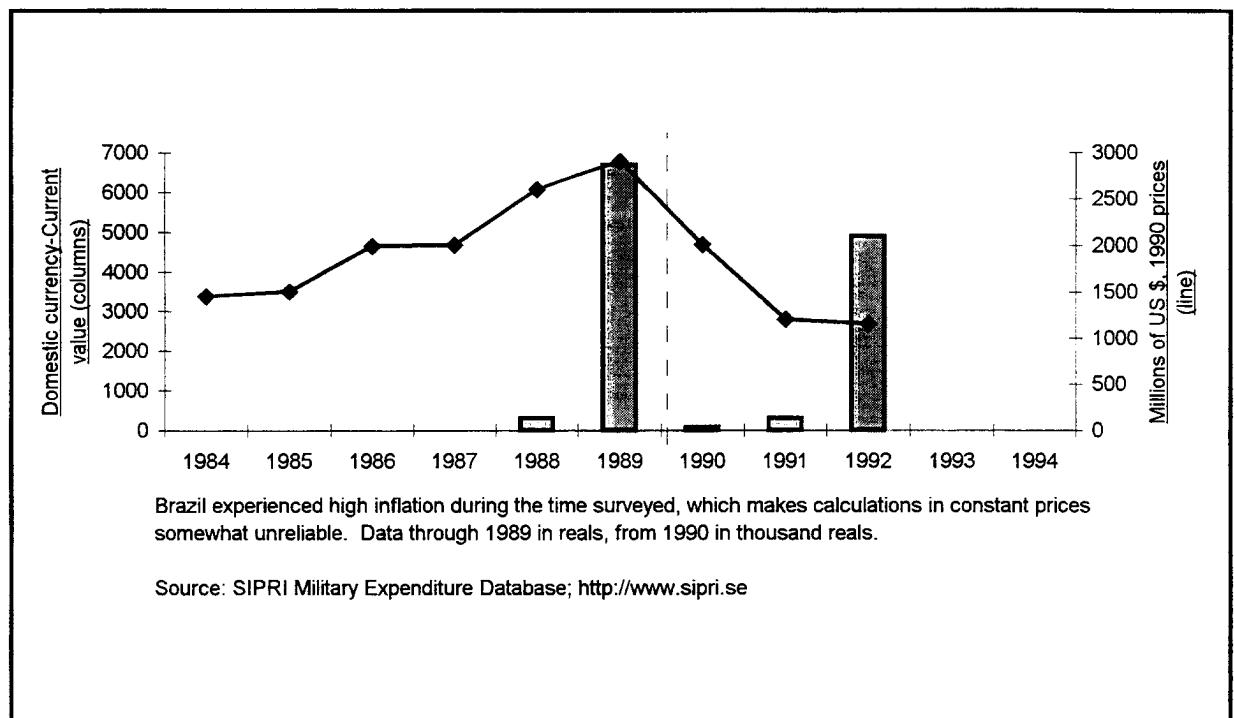


Figure 3. Brazil Military Spending - trends.

In addition to providing a mandate, the imposition of civilian control also made the MTCR controls against Brazil more effective. This is because the impact of these controls, combined with his own domestic requirements (for economic growth, realignment of government spending, civilian control and international assistance) gave President Collor (as well as Presidents Franco and Cardoso) an urgent need to push through legislation for adherence to the MTCR. The desire for economic growth

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<sup>47</sup> Ibid.

exacerbated the need for science and technology,<sup>48</sup> the very items that were curtailed by the MTCR. This desire for growth by the civilian leadership ultimately led to membership.<sup>49</sup>

In conclusion, it can be seen with regard to the independent variable, elections, the change to civilian leadership provided a situation in which the leadership was responsive to internal and external pressures (sanctions due to Iraqi transfers, domestic professional groups, the press, and Congress). These pressures pushed for a cessation of transfers to Iraq and the reallocation of capital to civilian purposes. This was especially true in comparison to the reduced impact these pressures would have had on the military leadership. This occurrence also coincided with the three civilian presidents' (Collor de Mello, Franco, and Cardoso) desires to curb military influence and spending following their inaugurations. Additionally, the impact of international and domestic pressures (for budgetary and technology growth), which were utilized as an election platform during the electoral processes, gave President Collor a mandate and the required public support for him to accomplish the stated goals.

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<sup>48</sup> As President Collor noted, "The challenges of a worldwide economy are intensified in a system in which science and technology are the basic ingredients." See Clifford P. Graham. "The Technological Imperative: A Brazilian Perspective on Dual-Use Technology," p. 239.

<sup>49</sup> José Monserrat Filho, "The new Brazilian Space Agency: a political and legal analysis," Space Policy, May 1995, p. 124.

## C. THE RELATIONSHIP BETWEEN GOVERNANCE AND MEMBERSHIP IN THE MTCR

The influence of governance (democratic institutions, parties, bureaucracy) on membership in the regime is not as clear-cut as the impact of elections. This is because the manner in which this factor of democracy influences membership is more ambiguous than the overt impact of elections. The facets of governance are the pathways and inner workings of democracy, as opposed to the clear, overt outcome of elections. Nevertheless, despite this ambiguity, the impact of this independent variable on democracy is still relevant to this investigation into membership in the MTCR, because it helps define what makes up democracy.

Governance is partially comprised of Brazil's adherence to a rule of law. This facet of governance provided the basis for the Brazilian Senate's approval of President Cardoso's export control bill, Export Control Law #9112. The law's passage was a requirement for MTCR membership. It also gave authority to the government to enforce violations of the Brazil's export controls.<sup>50</sup> Brazil's membership in the MTCR would not have been approved if it did not have a developed judiciary system that the international community could trust.

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<sup>50</sup> Arms control agreements presupposes the existence of stable governments in control of the weapons trade and able to enter into binding treaties or agreements. The reality of shaky regimes and ethnic discontent, along with multinational arms production among manufacturers, undermines these expectations. See Frederic S. Pearson, The Global Spread of Arms: Political Economy of International Security, Boulder, CO: Westview Press, 1994, pp. 87, 93.

Another of the facets of governance, as defined earlier, is the concept of civil liberties and their guarantee by a responsible, representative, law-abiding government. This process, stated in the Constitution, assures the people that their desires for a better life are heard.<sup>51</sup> By comparison, the electoral process, another independent variable, would not have been responsive to the people's desires without these guarantees of freedom of speech, association, etc. Thus, the impact of civil liberties, in combination with the electoral process, put pressure on the competing parties and candidates to guarantee a more equitable division of domestic assistance. This popular pressure prompted the Collor, Franco, and Cardoso administrations to respond. This response to the people took the form of more international assistance, technology, aid, loans, and domestic restructuring.<sup>52</sup> This popular pressure, as mentioned above, therefore facilitated membership in the regime.

Additionally, the existence of a civilian-led government run by a rational bureaucracy provides the basis for a fair distribution of assets. This distribution would be in accordance with the will of the legislature and the Constitution. These domestic institutions and structures guarantee that the government disperses its economic resources and executes its foreign policy, positively, and in response to the will of the civilian population.<sup>53</sup>

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<sup>51</sup> The lowest incomes have felt the most improvement from Real Plan, measured by explosion in sales in consumer appliances (color television sets, freezers), investment from foreign companies and privatizations. See Diana Jean Schemo, "Brazil Economy Is Booming, but Some Problems Loom," New York Times, September 7, 1996.

<sup>52</sup> John D. Sullivan, "Democratization and Business Interests," Journal of Democracy, Volume 5, Number 4, October 1994, p. 150.

In the Brazilian case, this institutional strength of governance manifests itself through the actions of the bureaucracy, and the elected executive and legislature who created the required laws for membership in the regime. The importance of the professional bureaucracy is that the numerous laws created for adherence or membership in the regime would not have been effective or policed. Further, the benefits of the redirection of domestic capital from state/military to non-military needs would not have been effectively transferred, with the resultant economic growth,<sup>54</sup> without a responsible government adhering to and allocating the legislated dispersal of capital expenditures.

Finally, the many aspects of governance (constitutional, representative government; rational, rule-bound bureaucracy; the rule of law; guarantees for civil liberties) work in combination toward the subordination of the military to civilian leadership.<sup>55</sup> This subordination to elected officials by the military allows the government to redistribute capital to civilian needs without military confrontation. This acquiescence also facilitates the closure of military technology centers, and the halting of technology transfers (as required by the MTCR). This effect is due to the military's subordination to

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<sup>53</sup> Thomas Risse-Kappen, "Public Opinion, Domestic Structure, and Foreign Policy in Liberal Democracies," World Politics, Volume 43, July 1991, pp. 484, 511.

<sup>54</sup> The Cardoso Real Plan, has shrunk the inflation rate from 900 percent to 12 percent in two years, as well as stabilizing the economy, and bringing in investment. It also is attempting to curb federal spending, eliminate government jobs, and increase tax collection. The state companies will be made to sell non-operational assets to reduce fiscal deficit, with the possibility of bringing the deficit under 2.5 percent of GNP in 1997, from 3.5 percent in 1996, and 5 percent in 1995. "Brazil to Curb Spending, Eliminate Government Jobs, Increase Tax Collection," Reuters, 11 October 1996; "Go, Go, Whoa," The Economist, December 1996, p. 73; and Diana Jean Schemo, "Local Votes In Brazil Are a Test For Leader," New York Times, August 23, 1996, p. A5.

<sup>55</sup> John D. Sullivan, "Democratization and Business Interests," Journal of Democracy, Volume 4, Number 4, October 1994, p. 159.

civilian policing and budgetary controls of the bureaucracy, as well as the guarantees of civil liberties that protect the people from military violence.

In conclusion, it can be seen that governance is vital to membership in the MTCR. The impact of this variable not only guarantees the MTCR-required basis for self-policing of indigenous export controls, but also provides the reallocation of state assets and capital from military industries. It provides the “transmission belts” for the population to appeal to their politicians, and ensure the national government’s adherence to congressionally-approved budgets. The existence and workings of governance also work to ensure the subordination of the military to civilian control through its linkages to the people, the Constitution, the bureaucracy, and to the rule of law.

#### **D. THE RELATIONSHIP BETWEEN POLITICAL CULTURE AND MEMBERSHIP IN THE MTCR**

The influence of the independent variable, political culture (norms, values, and beliefs), on membership is similar to the influence of governance, in that it is also not so clear cut. This is because the forms of influence that political culture takes is also ambiguous. However, due to the fact it helps define democracy, it is also relevant to this investigation of its influence in membership in the Brazilian case into the MTCR.

The desire by the national leadership, the elites, and the educated populace for Brazil to join the ranks of “responsible,” stable and law-abiding nations, as well as taking its place on the world stage as a regional power,<sup>56</sup> impacts positively on Brazil’s decision

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<sup>56</sup> Center for International Security and Arms Control, Assessing Ballistic Missile Proliferation and Its Control, Stanford, CA: Stanford University, 1991, p. 77.

for membership. This belief by the Brazil people for greater influence on the global scene has prompted the government to weave its international relations toward a more respectable, and trustworthy status.<sup>57</sup> This belief has not manifested itself in the possession of nuclear weapons and missiles, because of the impact of technology controls against Brazil and civilian control over the military. These two factors have steered policy in the direction of nonproliferation. Civilian control has allowed the beliefs of the people, for economic growth and assistance from their government, to be translated into a halting of arms development programs. These arms programs were a drain on the treasury, and taking away resources from other domestic needs.

This desire for international standing has manifested itself first by cooperating with, and then joining the MTCR, which enhances Brazil's legitimacy on the world stage and in the developed world. The ultimate manifestation of this legitimacy would be Brazil's achievement of its goal, a permanent seat on the United Nations Security Council.<sup>58</sup> Brazil's membership in the regime fulfills both of the two basic criteria for a seat, a sense of political-strategic responsibility, and the possession of the economic and technological conditions to become a regional power.<sup>59</sup> Thus, Brazil's beliefs and values have promoted its own self-realization to a level of international respect and recognition, a level of recognition that the MTCR has provided.

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<sup>57</sup> Hal Klepak, "Finding its place as region's powerhouse," Jane's Defence Weekly, Volume 26, Number 17, October 23, 1996, p. 19.

<sup>58</sup> Wyn Q. Bowen, "Brazil's Accession to the MTCR," The Nonproliferation Review, Spring-Summer 1996, p. 88.

<sup>59</sup> Brazil possesses this, now that it is a member of the MTCR, and soon to be, space power, due to their responsibility as a nonproliferating nation. Mario Osava, "Brazil: Cardoso Seeks Heavy-weight Status for his Country," Inter Press Service, September 20, 1995.

Democratic governments must be more responsive to the demands of their citizens, partially due to its values, beliefs, and norms, desiring to assist the poorer citizens.<sup>60</sup> This desire expressed through elections and the transmission bands of governance serve to impel the leadership to redirect domestic capital from state and military industries to other non-military, social needs.<sup>61</sup> This further influences the government to seek international loans, technology and development assistance which is made available with membership in the regime.

Further, the people's desires for civilian control of the government, expressed through their participation in the electoral process, provide support to the leadership when facing the military in budgetary matters, and incites them to work to strengthen the underpinnings of democracy through the subordination of the military to the civilian leadership.

In conclusion, the values, norms, and beliefs of Brazil work to make Brazil a member of the MTCR. This is due to a desire for global and regional leadership, requiring mature adherence to international norms and a desire for economic growth and stability. This is gained through international assistance from membership and a national desire for civilian control of the country. This existence and nature of the political culture did not

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<sup>60</sup> Bolívar Lamouvier, "Brazil: Inequality Against Democracy," Larry Diamond, Juan J. Linz, and Seymour Martin Lipset, editors, Politics in Developing Countries: Comparing Experiences with Democracy, Boulder, CO: Lynne Rienner, 1995, pp. 162-63.

<sup>61</sup> An example of the civilian leadership redirecting capital from military industries is the discovery and closure of the secret Brazilian nuclear test site by President Collor. Jose Goldemberg and Harold A. Feiveson, "Denuclearization in Argentina and Brazil," Arms Control Today, March 1994, p. 13.

change in the transition from military to civilian government. The opening to civilian government only enabled the political culture to re-emerge as a force of policymaking.

#### **E. THE RELATIONSHIP BETWEEN ECONOMIC FREEDOM AND MEMBERSHIP IN THE MTCR**

The economic influences are discussed earlier in the analysis of the other independent variables. This is due to the fact that economics is one of the underlying factors that motivate the masses, the leadership, and the international community. It is this need for continued economic growth, to raise standard of living in response to the people's desires, for example, that prompted a realization that decreased border tensions with Argentina would enable a redirection of capital to domestic, non-military needs.<sup>62</sup> This resulted in the curtailing of missile production, facilitating membership.<sup>63</sup>

Likewise, the election and re-election of civilian governments, under Presidents Collor and Cardoso, promoted a renewed look at the economic policies of the nation. This electoral process also served to focus attention on redirecting and reforming the monetary policies of the nation to improve social conditions. This improvement was promoted by a commensurate cutting of military spending, privatization, and public sector

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<sup>62</sup> This decrease in border tensions might also be attributed to the democratic peace between nations, due to economic, institutional and electoral limitations controlling any belligerent actions.

<sup>63</sup> John R. Redick, "Latin America's Emerging Non-Proliferation Consensus," Arms Control Today, March 1994, p. 6.

reform.<sup>64</sup> These efforts decreased the amount of assistance the Brazilian arms industries received.

Similarly, a decreasing desire by other nations for Brazilian arms, especially with regard to the Middle East (due to the end of the Cold War, the Iran-Iraq War, and Persian Gulf War),<sup>65</sup> prompted a re-evaluation of those industries, with regard to the amount of national assistance they would receive. This re-evaluation, combined with the change to a less supportive civilian government, inspired a decrease in federal assistance. The decrease in importance of the weapons industries assisted Brazil's decision to curtail proliferation, thereby facilitating membership.<sup>66</sup>

The decrease in amounts of Brazilian arms exports can be seen in Figure 4.<sup>67</sup>

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<sup>64</sup> Ibid., pp. 163-64.

<sup>65</sup> David Mussington, Understanding Contemporary International Arms Transfers, London: International Institute for Strategic Studies, Adelphi Paper, 291, September 1994, pp. 10-11.

<sup>66</sup> Interestingly, this re-evaluation prompted an increased need for space technology, due to a renewed emphasis in this direction by the government. Roberto Godoy, a Brazilian science journalist, "When Brazil changed its military presidents for civilians, in 1985, the program changed radically, giving up its military aspects and dedicating itself to launching satellites"; see "Brazil's Dream of Space Power Draws Near," Los Angeles Times, December 12, 1995, p. 8.; and Ronald M. Schneider, Brazil: Culture and Politics in a New Industrial Powerhouse, Boulder, Westview Press, 1996, p. 130.

<sup>67</sup> Note the graph due not use money, but trend indicator values.

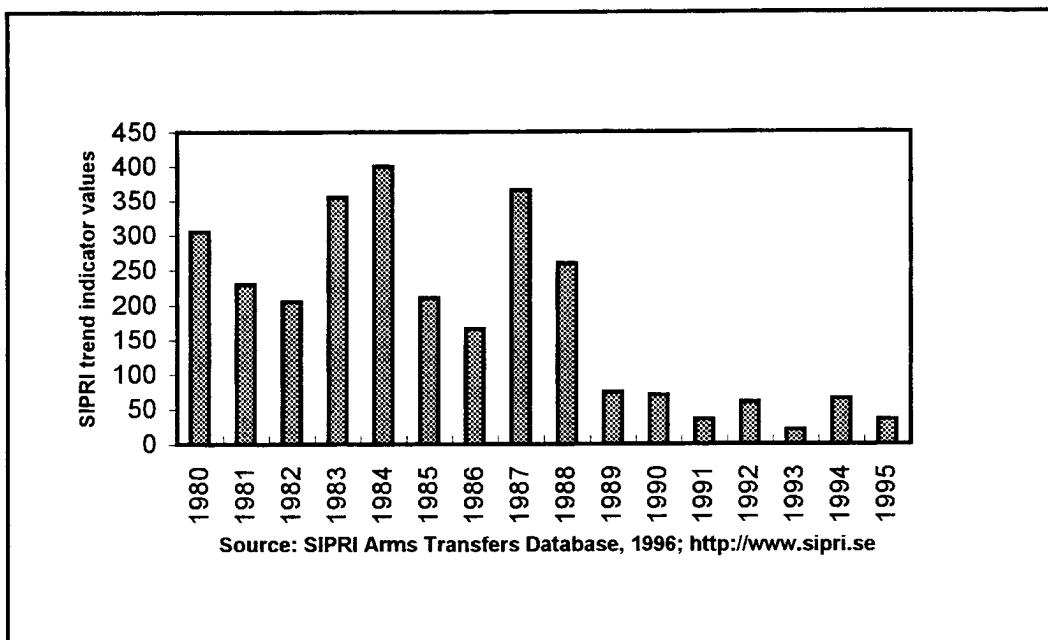


Figure 4. Brazilian arms exports, 1980-95.

The decreased ability of the arms industry to acquire crucial foreign technologies for further missile development, due to U.S.-led export controls, also impinged on domestic commercial rocket development. This lack of resources for the space program led to an increase in the impact of the regime's controls.<sup>68</sup> This was because the pressure of controls impacted when the government was attempting to convert from military arms production to peaceful space development. Ultimately, this pressure led to a re-evaluation of Brazil's position on adherence and membership.

The operation of a market economy works to provide linkages between internal actors, and from internal actors to external actors, through the transmission of

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<sup>68</sup> Philip Finnegan, "Brazil Prepares To Sign MTCR," *Space News*, April 24-30, 1995, pp. 3, 29; and José Monserrat Filho, "The new Brazilian Space Agency: a political and legal analysis," *Space Policy*, May 1995, p. 126.

information, technology, loans, and international trade.<sup>69</sup> The benefit of information transmission positively influences a nation's membership in the regime.<sup>70</sup> This is because the free flow of information allows current members to investigate the ability of the prospective members to curtail proliferation,<sup>71</sup> in addition to allowing the nation to police itself. This ability to police itself is required by the MTCR.

The need for technology, loans and international trade in a market economy further provides incentives for regime members to use again proliferant states. This requirement for technology, loans, and trade acts as leverage against proliferating states, through the non-proliferating state's ability to curtail these benefits. Thus, the market economy strengthens the ability of the regime to work, by increasing the effect of its controls on proliferant nations.

In conclusion, the influence of economic factors positively induced Brazil to join the MTCR. This was due to the civilian leadership's desire to respond to the needs of the people. This manifested itself in a need to continue economic growth, improve social conditions, cut federal spending, privatize, and conduct public sector reform. These factors, combined with a desire for a stable economy, lessened the economic influence of the arms industries in the country, decreased their amount of government assistance, and raised the importance of the civilian space program. This increase in the civilian program

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<sup>69</sup> John D. Sullivan, "Democratization and Business Interests," *Journal of Democracy*, Volume 4, Number 4, October 1994, p. 159.

<sup>70</sup> As well as, strengthening democracy, by permitting people to be involved in their government and economy.

<sup>71</sup> M. Granger Morgan and Mitchel B. Wallerstein, "Controlling the High-Technology Militarization of the Developing World," W. Thomas Wander and Eric H. Arnett, editors, *The*

and decrease in the arms industry, with an associated increase in Brazil's desire for information, technology, loans, and international trade, strengthened the impact of the regime and of the leverage that MTCR members were able to bring to bear. These positive benefits, combined with the increased leverage of international pressures, induced Brazil to join the regime.

#### **F. SUMMARY**

The thesis hypothesis, that democracy is a necessary but insufficient condition for states to join the MTCR appears valid in the Brazilian case.

Democratic elections allow for the civilian population to express their political cultural desires for material and monetary assistance. This is accomplished through the population's selection of appropriate civilian leadership and policies. President Collor received this mandate during a period of increased international pressure for non-proliferation. This resulted in his administration beginning the stated goal of dismantling the military industries, improving the economy, and reorganizing state budget allocations. He provided the beginnings of adherence. These initiatives were built on by successor presidents to obtain continued access to the international economic and technological benefits that they also required.

The structures of democratic governance provided the legal infrastructure required for membership in the MTCR, as well as the transmission belts or communication pathways required for the civilian leadership's electoral mandate to reallocate state assets and capital from military industries, and build the infrastructure to subordinate the military.

The impact of Brazilian values, norms, and beliefs worked to influence the civilian leadership by encouraging a desire to make Brazil a legitimate global and regional leader. This aspiration requires mature adherence to international norms, and a desire for economic growth and stability.

Economic influence took the form of a requirement for continued economic growth, improved social conditions, cutting of federal spending, privatization, and public sector reform, due to a popular mandate to the civilian leadership. This mandate required more capital, loans, development assistance, and technology from the outside world. This was especially relevant for growth in the commercial space industry and national non-military projects. This increase in the civilian program and decrease in the arms industry, with an associated increase in Brazil's desire for information, technology, loans, and international trade, positively influenced Brazil to join the regime.

In summary, the effect of these democratic variables, combined with export controls, had more of a non-proliferant impact than with export controls alone on a non-democratic nation. This is because the four independent variables enhanced the effect of the export controls. This accentuation resulted from the pressure on the leadership through the economy and through the democratic norms, events, structures and pathways. Democracy thus was the critical factor that enabled the pressure on the Brazilian civilian leadership to stop proliferation and join the regime.

Additionally, although the four independent variables worked in unison to facilitate membership in the regime, the *primary* variables were the impact of the economy and the desires of the people, working through the democratic pathways, to influence the

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American Association for the Advancement of Science, 1992, p. 295.

leadership during the electoral process. These desires of the people for economic growth, improved social conditions, cutting of federal spending, privatization, and public sector reform, as well as growth of Brazil into a regional and global power, led the leadership to membership in the MTCR. Thus, the most influential variables were the economic freedoms and political culture of Brazil.

### **III. CASE STUDY: CHINA**

The purpose of this chapter is to investigate the influence of democracy on China's membership in the MTCR. The chapter begins by investigating the degree of Chinese democratic development, as well as the history of China's relationship to the MTCR. Following these two sections, the impact of the four independent variables are analyzed with regard to China's membership. The chapter closes finding that the hypothesis is proven in the Chinese case.

Despite the presence of democratic factors, China's lack of full democracy is hindering its membership in the regime. This is due to the fact that the Chinese domestic and international influences favor non-adherence and non-membership. It is these influences that would all be sufficiently minimized or curtailed with the installation of full democracy. Further, without the combined effect of these variables, the beneficial impact of democracy on the MTCR would not occur since each variable strengthens the others and enables their influence on membership.

#### **A. BACKGROUND**

##### **1. History of democracy in China**

During the late 1970's, fundamental changes occurred in China's domestic environment. The end of the Cultural Revolution (1966-76) and the reemergence from internal exile of Deng Xiaoping, combined with his reintroduction of Zhou Enlai's plan of the "Four Modernizations," induced the change toward market-oriented reforms. This

change was an effort to create economic growth,<sup>72</sup> to raise China up to First World status. In parallel with this change, the Chinese Communist Party (CCP), which still retains political control, began to introduce administrative, legislative, and legal reforms. These associated steps were Deng Xiaoping's portion of the program. The idea was that a new political order would be constructed. This new order would be more conducive to economic modernization, though without a resultant democratization of the country. Most importantly, it would do so while maintaining civil stability through the country, and political and military stability on its borders.

Despite the CCP's efforts, events over the past 15 years have led to unintended consequences that augur well for democracy in China in the long term. Notable changes have taken place with regard to elections, and the degree of democratic institutions or "governance," as well as the beginnings of normative, and behavioral changes.

As evidence of these changes, the rule of law is gradually emerging and acquiring constraining power against the Communist Party.<sup>73</sup> The rule of law also is battling the rampant corruption which has resulted from the economic modernization's three forms: decentralization, increased freedom for market forces, and growth in the private economy.<sup>74</sup> The judicial system has begun forming subtle but important checks and

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<sup>72</sup> The "Four Modernizations" were directed at farming, industry, science and technology, and defense, in that order of priority. See Conrad Schirokauer, A Brief History of Chinese and Japanese Civilizations, Harcourt Brace Jovanovich, Publ, 1989, p. 617.

<sup>73</sup> Strobe Talbott, "Democracy and the National Interest," Foreign Affairs, Volume 75, Number 6, November/December 1996, p. 57.

<sup>74</sup> The most recent attempts have resulted in new laws targeting money laundering, insider trading, computer viruses, breaking into information networks, forced labor, illegal collection of blood, and the intimidation of a witness. See Seth Faison, "Chinese Revise Criminal Code, Not Its Essence,"

balances against the ruling party's monopoly of power,<sup>75</sup> although without great effect.<sup>76</sup> The National People's Congress is slowly beginning to flex their constitutional authority in the legislature by creating laws (mostly in environmental and social issues),<sup>77</sup> exercising their powers of confirmation and formal approval of key government decisions, and questioning the absolute control practiced by the CCP.<sup>78</sup> Additionally, up to 72 percent of the population practice village democracy, either through universal suffrage or secret ballot, electing their own village chiefs and village committees (some villages in 1997 are holding their third or fourth consecutive election).<sup>79</sup> In the 1991 elections, 49 percent of the winners were non-Communist Party members.<sup>80</sup> Additionally, these village elections have begun to influence the provincial-level elections, with some candidates not being

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New York Times, March 7, 1997, pp. A1, A7; and Michael Johnston and Yufan Hao, "China's Surge of Corruption," Journal of Democracy, Volume 6, Number 4, October 1995, pp. 80-94.

<sup>75</sup> Official records show that approximately 44,000 private lawsuits have been filed against the government, in accordance with the Administrative Litigation Act enacted in October 1990, stating that the government has violated their civil liberties and property rights. In addition, laws on the books have been created to guarantee free access to legal council, and the constitutionally mandated right of freedom of speech and assembly. See *Ibid.*, p. 69; and Elaine Kurtenbach, "China works on legal system," Associated Press, January 18, 1997.

<sup>76</sup> In the most recent revision of criminal laws, China eliminated the overtly political category of "counterrevolutionary" crimes in favor of those that "endanger state security." Despite this change, the manner of deciding cases based on guidance from Communist Party officials will continue, vice being based on legal opinion. See Seth Faison, "Chinese Revise Criminal Code, Not Its Essence," New York Times, March 7, 1997, pp. A1, A7.

<sup>77</sup> "China's parliament-in-waiting," The Economist, November 2, 1996, p. 34.

<sup>78</sup> Andrew J. Nathan, "China's Constitutional Option," Journal of Democracy, Volume 7, Number 4, October 1996, p. 65.

<sup>79</sup> "China's grassroots democracy," The Economist, November 2, 1996, p. 33; Henry S. Rowen, "The Short March: China's Road to Democracy," The National Interest, Number 45, Fall 1996, p. 62.

<sup>80</sup> Henry S. Rowen, "The Short March: China's Road to Democracy," The National Interest, Number 45, Fall 1996, p. 62.

from the CCP.<sup>81</sup> These institutional, economic, and electoral changes also can be seen as evidence of a growing trend by ordinary citizens to become more politically active (primarily in defense of their newly acquired property rights and economic gains). In addition, they are becoming more politically aware (even if only at the grassroots level),<sup>82</sup> expanding their democratic norms, values, and beliefs in society. The economic growth and prosperity has also allowed millions of Chinese to travel overseas, thus exposing them to democracies and their benefits to society and the individual.<sup>83</sup>

Despite these democratic gains, the ultimate impact of these actions is still to early to predict. This ambiguity is due to the continuing Communist control over the central government, the bureaucratic structures, the press and other information services,<sup>84</sup> and the military (a reflection of the government suppression of China's most recent mini-waves of spontaneous pro-democratic activity).<sup>85</sup> This is especially true now with regard to the death of Deng Xiaoping in February 1997. His passing has put the question of control and stability of the government to the forefront,<sup>86</sup> and increased the likelihood of a continuance

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<sup>81</sup> Ibid., p. 63.

<sup>82</sup> Minxin Pei, "'Creeping Democratization' in China," Journal of Democracy, Volume 6, Number 4, October 1995, p. 75.

<sup>83</sup> Seth Faison, "Asia's Giant, After Detours, Takes Familiar Growth Path," New York Times, March 4, 1997, pp. A1, C4.

<sup>84</sup> Seth Faison, "In China's Newspapers, Few Tea Leaves to Be Read," New York Times, February 27, 1997, p. A5.

<sup>85</sup> These mini-waves were the Democracy Wall movement in 1978-79, the student demonstrations of 1986-7, and the Tiananmen Square demonstrations in 1989. These waves constitute the main societal efforts at democratization in China. See Minxin Pei, "'Creeping Democratization' in China," Journal of Democracy, Volume 6, Number 4, October 1995, p. 68.

of authoritarian controls over the economy, institutional and bureaucratic government, and the People's Liberation Army (PLA).<sup>87</sup> The political institutions are also still at a nascent stage, despite the promising growth, with incompetent, corrupt bureaucrats and officials, and opaque laws, rules and regulations.<sup>88</sup>

As a result of these conflicting situations, the mass of the population is, for the moment, content to pursue economic wealth as long as the country remains stable, despite the growing grumbling about the corruption of the party and government officials.<sup>89</sup>

## **2. History of China's membership in the MTCR**

Interestingly, Chinese missile transfers were a primary target of the MTCR during its creation.<sup>90</sup> Despite this fact, the Chinese remained ambivalent about the regime, until 1991. The Chinese attention to the MTCR was in response to a ban on computer and satellite sales imposed by the United States (and to a lesser extent from other members), resulting in Chinese leaders announcing their adherence to the guidelines of the regime, in

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<sup>86</sup> This is especially true, with the current questions concerning President Jiang Zemin's ability to control China's disparate factions (military, civilian rivals, coastal vs. provincial factions, Xinjiang and Tibet separatists).

<sup>87</sup> It has been suggested that this policy of stability at all costs in an effort to maintain domestic growth will remain at least until the 15th Communist Party Congress, set for October 1997. See Steven Lee Myers, "U.S. Expects Few Changes In Relations With China," New York Times, February 20, 1997, pp. A1, A9.

<sup>88</sup> David Shambaugh, "Containment or Engagement of China?: Calculating Beijing's Responses," International Security, Volume 21, Number 2, Fall 1996, pp. 193-95.

<sup>89</sup> The chaos of the Cultural Revolution is still very well remembered.

<sup>90</sup> Wendy Friedman, "New Members of the Club: Chinese Participation in Arms Control Regimes 1980-1995," The Nonproliferation Review, Spring-Summer 1996, Volume 3, Number 3, p. 20.

November 1991.<sup>91</sup> The United States received this adherence in writing in February 1992. Despite this acceptance, confusion still continued over questions of how the Chinese were interpreting their agreement to adhere.<sup>92</sup>

The apparent confusion was evident because only after more threats and imposition of further trade restrictions did the PRC, in March 1992, halt the transfer of both M-9 and M-11 missiles to Pakistan. This action resulted in the sanctions being lifted. Despite this reassurance however, by August 1993 new sanctions were announced.<sup>93</sup> These were against PRC companies again participating in the transfer of M-11 components and technology to Pakistan (as opposed to complete systems, which was seen as an attempt to circumvent the MTCR pledge).<sup>94</sup> In October 1994, after statements again from China to not export surface-to-surface missiles that are within the parameters of the MTCR, the United States again lifted the sanctions imposed on China.<sup>95</sup>

Doubts continued in the United States over whether China was or was not complying with the regime's guidelines through the summer of 1995, and again in June 1996. This occasion was the American intelligence agencies' release of information that

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<sup>91</sup> The sanctions were in response to transfers to Pakistan. See Timothy V. McCarthy, A Chronology of People's Republic of China Missile Trade and Developments, Monterey, CA: International Missile Proliferation Project, Monterey Institute of International Studies, February 12, 1992.

<sup>92</sup> Wendy Friedman, "New Members of the Club: Chinese Participation in Arms Control Regimes 1980-1995," The Nonproliferation Review, Spring-Summer 1996, Volume 3, Number 3, p. 20.

<sup>93</sup> This time as required by law requiring such sanctions. *Ibid.*

<sup>94</sup> Karl W. Eikenberry, Explaining and Influencing Chinese Arms Transfers, Washington D.C.: Institute for National Strategic Studies, National Defense University, McNair Paper 36, February 1995, p. 48.

<sup>95</sup> Not notwithstanding a minor bending of the sanctions in January 1994, to permit the sale of Hughes satellites that had been blocked. "Missile and Space Launch Capabilities of Selected Countries," The Nonproliferation Review, Spring-Summer 1995, p. 187.

they again suspected China of helping Pakistan. The cause of this infraction was evidently Chinese assistance with construction of a factory building medium-range missiles.<sup>96</sup> The construction of the factory would be a violation of the MTCR, and thus a third violation of agreements by the PRC.

The current situation is that the Chinese have only made bilateral commitments to the United States, to adhere by the terms of the regime, and are not formal members. The expressed reason for the Chinese rejection of the MTCR is that they were not participants in its creation, and that it does not include areas that should be controlled (i.e., sales of advanced jet fighter and bomber aircraft, especially important before and after the United States sold F-16 fighters to Taiwan in 1992). The Chinese therefore have made various suggestions to how it should be structured.<sup>97</sup>

#### *a. Rationale for MTCR violations*

The original sale and continued development of ballistic missiles to Pakistan can be seen as stemming from various factors. The export of these technologies can be attributed to a China-India rivalry, and Beijing's determination to thwart India's domination in the region by promoting a nuclear balance of power.<sup>98</sup> China possesses a

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<sup>96</sup>Tim Weiner, "U.S. Suspects China Is Giving Pakistan Help With Missiles," New York Times, August 26, 1996, p. A4.

<sup>97</sup> These have been discounted by the members, since the question of "fairness" or inclusion at the MTCR's start, is not an issue, only meeting the appropriate standards. See Wendy Friedman, "New Members of the Club: Chinese Participation in Arms Control Regimes 1980-1995," The Nonproliferation Review, Spring-Summer 1996, Volume 3, Number 3, p. 20.

<sup>98</sup> India possesses the Prithvi series, and Agni and Surya missiles (Prithvi 150: Range - 150 km., Payload - 1000 kg.; Prithvi 250: Range - 250 km., Payload - 500 kg.; Prithvi 350 (in development) Range - 350 km., Payload - unknown; Agni (in development) Range - 1500-2500 km., Payload - 1000+ kg.;

strong determination to create a strategic balance on its western flank due to fears of becoming encircled.<sup>99</sup> By promoting a strong Pakistan, it serves to offset India. This fear also contributes to greater cooperation, trade and commerce between Pakistan and China. This helps to bring China's western provinces more affluence, in line with Beijing's policy for economic growth and global trade. This possibly mollifies outspoken groups in the western provinces (Xinjiang, Tibet), who are jealous of the coastal regions' successes, or desirous of independence.<sup>100</sup>

Another possible reason for China's infractions is a stronger influence by the PLA and other Ministries in government.<sup>101</sup> In addition, the PRC's relationship with Pakistan has long been the province of the Chinese military.<sup>102</sup> This relationship manifests itself in continued technology transfers. The continued pressures for transfers are also due to PLA and other Ministries' desires for hard currency that result from the lucrative arms trade.<sup>103</sup> Many of the companies are controlled by the children or family members of

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Surya: (in development) Range - 12000 km., Payload - unknown). The premise is that if China helps Pakistan secure medium-range missiles they would balance missiles that India, a larger and more advanced country, already has developed for itself. See "Missile and Space Launch Capabilities of Selected Countries," The Nonproliferation Review, Spring-Summer 1996, p. 187; Steven Erlanger, "U.S. Wary of New Headache With Chinese in Dispute Over Pakistan Missiles," New York Times, August 27, 1996, p. A5.

<sup>99</sup> Bates Gill and Matthew Stephenson, "Search for Common Ground: Breaking the Sino-U.S. Non-Proliferation Stalemate," Arms Control Today, Volume 26, Number 7, September 1996, p. 17.

<sup>100</sup> Patrick E. Tyler, "Ethnic Strain in China's Far West Flares With Bombs and Rioting," New York Times, February 28, 1997, pp. A1, A7.

<sup>101</sup> For the extent of influence that the PLA now retains in decision-making, see June Teufel Dreyer, "The Military's Uncertain Politics," Current History, September 1996, 95:602, pp. 254-59.

<sup>102</sup> Patrick E. Tyler, "China Raises Nuclear Stakes on the Subcontinent," New York Times, August 27, 1996, p. A5.

<sup>103</sup> Bai Si Yeng, "Understanding the Chinese defence industry," Military Technology, March 1987, p. 50.

current PLA leadership,<sup>104</sup> which hinders governmental control. This desire for exports is also due to the PLA's need to subsidize their normal military operations, as well as to modernize the forces, to make up for budgeting shortfalls from the government.<sup>105</sup> The money earned from these PLA companies serve to finance research and development and equipment procurement.<sup>106</sup> The sale of arms also serves to maintain a positive relationship with other states for their access to resources (i.e., China's deficiencies in future oil production can be alleviated by access to Iranian, Saudi Arabian, Iraqi, and Libyan oil).

The need for supplementary sales from PLA industries to augment Chinese military spending are evident through the slight decline in budgetary expenditures, and the decrease in percentage of PLA budgetary allowance (or Military Expenditure) versus gross national product (GNP), that are shown in Figures 5 and 6:<sup>107</sup>

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<sup>104</sup> John W. Lewis, Hua Di, and Xue Litai, "Beijing's Defense Establishment: Solving the Arms-Export Enigma," International Security, Spring 1991, Volume 15, Number 4, pp. 91-96.

<sup>105</sup> This coincided with Deng's shift from the Maoist policy of "people's war" to that of "local war," emphasizing rapid-reaction forces equipped with quality weapons. See International Institute for Strategic Studies, The Military Balance, 1995-1995, London: Oxford University Press, 1995, p. 270.

<sup>106</sup> Richard A. Bitzinger, "Arms to Go: Chinese Arms Sales to the Third World," International Security, Volume 17, Number 2 (Fall 1992), p. 86.

<sup>107</sup> The graph of Military Expenditures vs. GNP does not show the impact of the growth in GNP, only in the declining percentages of military budgets; also important is the marked decline in MILEX/GNP after Deng's accession in 1978, due to the "Four Modernizations."

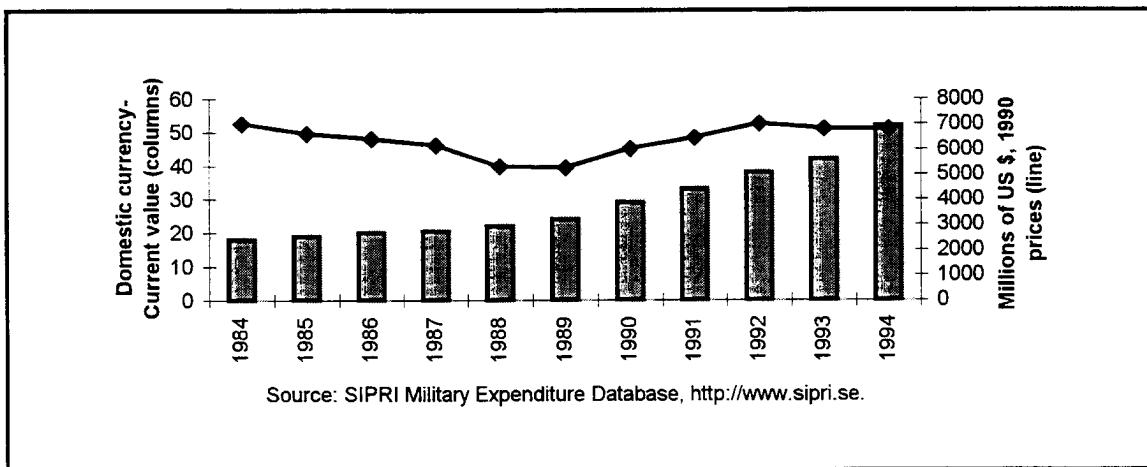


Figure 5. China, PR, Military Spending - trends.

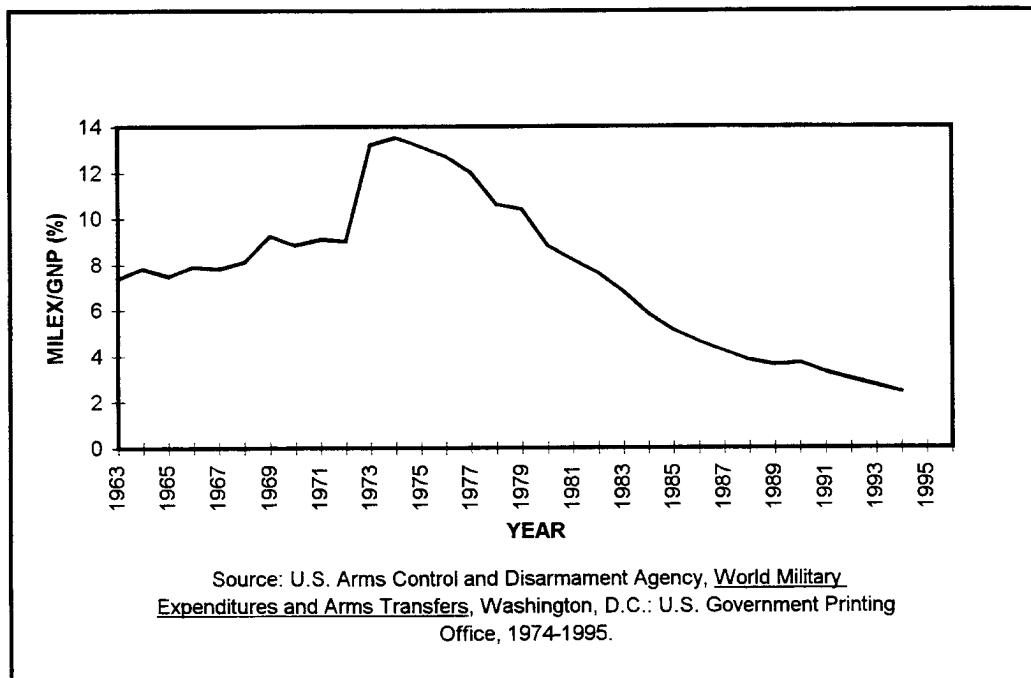


Figure 6. China Military Expenditures/GNP.

The continual governmental exhortations to rally around the nation, and other forms of Chinese nationalism are an additional factor fueling the persistent

confrontation between the United States and China over the weapons transfers.<sup>108</sup> This agitation can in part be attributed to U.S. arms sales to Taiwan, including F-16 fighters. These American transfers represent a proliferation of American high technology weapons into Chinese territory (given that the United States abides by its “one China” policy). These American sales onto Taiwan (Chinese soil) provokes anti-American nationalist feelings. These influence PRC government policy, combining nationalism with the leadership’s need for legitimacy to make the leadership go against American desires (i.e., MTCR adherence). The sale of American aircraft to Taiwan are further perceived as a destabilizing factor by Beijing with regard to its efforts to reunify with Taiwan, causing additional negative feelings on other issues (i.e., MTCR).<sup>109</sup>

Furthermore, concerning regional politics, the PLA’s lack of force projection makes the arrangement of transfer of technology a positive endeavor. This would seem to provide a cost-effective way to remain a player in regional security affairs, even if it could not project power militarily. The transfers also provide a way to ensure continued access in North Korea, at little expense.<sup>110</sup>

And finally, the geopolitical notion of defying American efforts in the region tends to promote Chinese influence in Asia.<sup>111</sup> The sale or transfer of technology

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<sup>108</sup> Begun by Deng Xiaoping, nationalism is being used by the leadership to maintain legitimacy, in addition to economic growth. Edward Friedman, National Identity and Democratic Prospects in Socialist China, Armonk, NY and London: M.E. Sharpe Inc., 1995, p. 129.

<sup>109</sup> Wendy Friedman, “New Members of the Club: Chinese Participation in Arms Control Regimes 1980-1995,” The Nonproliferation Review, Spring-Summer 1996, Volume 3, Number 3, p. 20.

<sup>110</sup> Eikenberry, p. 22.

<sup>111</sup> Gordon Jacobs and Tim McCarthy, “China’s Missile Sales - Few Changes for the Future,” Jane’s Intelligence Review, December 1992, p. 563.

serves several purposes: to build Chinese influence in the region, while weakening the American influence; show support and show solidarity toward developing nations, and a way to solidify political ties with other nations; and serve to offset a possible perceived encirclement of China by other modern powers.<sup>112</sup> The Chinese have minimal national interest in stability in the Middle East and northern Africa.<sup>113</sup> Thus, they have little incentive for arms control and non-proliferation of conventional weapons, or to forgo profits from weapons or technology transfers. These are also at odds with American interests.

Thus it can be seen that these economic, geopolitical/strategic, domestic business and political factors created an impetus for stepped-up arms transfers to a whole host of nations, and not only Pakistan.<sup>114</sup>

## **B. THE RELATIONSHIP BETWEEN ELECTIONS AND MEMBERSHIP IN THE MTCR**

At the moment, there are no direct elections for the top leadership in China, though there is some low level degrees of democracy that have been caused by the

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<sup>112</sup> John Wilson Lewis and Hua Di, "China's Ballistic Missile Programs: Technologies, Strategies, Goals," International Security, Fall 1992, Volume 17, Number 2, p. 40.

<sup>113</sup> Robert S. Ross, "Beijing as a Conservative Power," Foreign Affairs, Volume 76, Number 2, March/April 1997, p. 39.

<sup>114</sup> These include: Saudi Arabia, Syria, Libya, Iran, Iraq, North Korea, Afghanistan (rebels), Cambodia (Khmer Rouge), and numerous African nations (to counter Soviet moves). See Richard A. Bitzinger, "Arms to Go: Chinese Arms Sales to the Third World," International Security, Volume 17, Number 2 (Fall 1992), pp. 84-111; and See Timothy V. McCarthy, A Chronology of People's Republic of China Missile Trade and Developments, Monterey, CA: International Missile Proliferation Project, Monterey Institute of International Studies, February 12, 1992.

loosening of economic controls in China. It is these grassroots-level elections that may in the future grow and bring on further democracy.

Nevertheless, despite the lack of true elections, the leadership still requires a mandate or a show of legitimacy to remain in power, especially with the death of Deng Xiaoping, which is placing Jiang Zemin's position in question. The notions of nationalism to rally and lead the people, through which the leadership is attempting to retain legitimacy, are negatively impacting on China's adherence and membership in the MTCR. This is due to the fact that these methods of maintaining a mandate from the people lead to confrontation and a need to retaliate against the United States (i.e., China's missile sales to Pakistan were perceived as in retaliation against the United States for F-16 fighter sales to Taiwan, against American wishes and against China's stated adherence to the MTCR). In addition, the benefits of continued economic growth also are in the interests of the leadership to maintain legitimacy. This need for economic growth also impacts negatively on China's membership, since it motivates arms sales or technology transfers. The growth of China's electoral process to the national level would allow the leadership to receive their mandate through a more direct and less confrontational manner.

## **C. THE RELATIONSHIP BETWEEN GOVERNANCE AND MEMBERSHIP IN THE MTCR**

PLA businesses, as well as other Ministries businesses, are conducting technology transfers without permission from the central authorities, or in violation of established adherence guidelines, due to the low developed level of bureaucratic oversight and

policing, few standards of the rule of law, and lack of serious national representative government.<sup>115</sup> These form of governance are needed to control business.

There are few protections of civil liberties in China (though they are slowly growing in accordance with property rights), and as such, there is little direct pressure from the people for material assistance. This lack of oversight by the people allows the PRC leadership to divert capital to areas, and in ways, that do not directly benefit the people. This non-democratic situation allows public funds to be directed to corrupt state-owned companies, and others that are owned by the Communist elites. These elite-run and owned companies violate China's adherence to the regime with their sales and transfers of technology and weapons. This non-adherence is due to the fact that they are not responsible to the central government or the people, and by extension to the PRC's stated adherence.<sup>116</sup>

The PLA also possesses a separate power-base in China's governmental structural hierarchy, by their not being subordinate to the civilian leadership. This is especially true in the current changeover of power that has resulted from Deng's death.<sup>117</sup> It is such PLA independence in decision-making, and in technology transfers that allows them to bend or

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<sup>115</sup> R. Bates Gill, The Challenge of Chinese Arms Proliferation: U.S. Policy for the 1990s, Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 1996, p. 20.

<sup>116</sup> Tai Ming Cheung, "Serve the People," Far Eastern Economic Review, October 14, 1993, pp. 64-66.

<sup>117</sup> Jeremy T. Paltiel, "PLA Allegiance on Parade: Civil-Military Relations in Transition," The China Quarterly, Volume 143, September 1995, pp. 796-97.

violate China's adherence to the regime, and also allow them to influence the civilian leadership's decision-making in a pro-military direction.<sup>118</sup>

#### **D. THE RELATIONSHIP BETWEEN POLITICAL CULTURE AND MEMBERSHIP IN THE MTCR**

The slight amount of national level democratic experience (though this is beginning to change in the National People's Congress) has for the moment left the people with little ability to influence the Communist Party leadership, either positively or negatively. This also has left the people without a voice as to whether China should adhere to the MTCR.

There is a desire by the leadership to join the select ranks of technologically-advanced MTCR members, and thus gain status as a "responsible," stable and law-abiding nation. This would possibly provide some modicum of legitimacy to the leadership. This legitimacy would be achieved through the perception of the leadership working with the other advanced countries, and also through gained international prestige.<sup>119</sup> It is these connections the leadership that might lead in a positive direction to membership. However, just as working with the other great powers might benefit the leadership's bid for legitimacy, in some conservative circles of the Communist Party, and in nations outside the First World, nationalism, international prestige and influence might be inducing China

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<sup>118</sup> Ken E. Gause, "Jiang Zemin and the PLA," Jane's Intelligence Review, Volume 7, Number 6, pp. 277-81.

<sup>119</sup> Gerald Segal, "China After Deng," Jane's Intelligence Review, November 1994, p. 516.

to *not join*.<sup>120</sup> This means that the transfer of sanctioned technology might be a form of rebellion toward the United States.

Additional normative desires to offset a more powerful, and soon to be more populous India, by building up Pakistan through technology transfers and economic connections, are leading to continued violations of the regime and thus to non-adherence. This is influenced by desires to lessen American influence in East Asia. The lessening of American influence is accomplished by showing how ineffectual the American-led export controls are toward China.

Thus it can be seen how differing normative causal factors in China are leading non-adherence in the regime. Conversely, with the democratization of China, the normative need for legitimacy and the desire to offset perceived American and Indian threats will be diminished due to the influence of many differing viewpoints in the democracy and the legitimacy provided by the electoral process.

#### **E. THE RELATIONSHIP BETWEEN ECONOMIC FREEDOM AND MEMBERSHIP IN THE MTCR**

China's development has proceeded to such a level that it requires high technology for its continued international and domestic development. This need for technology, however, doesn't apply directly to missile development. This is due to the fact that the required level of technology for the missile's production has already been achieved (but it may affect communications, space systems, and other high technology). Therefore, the

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<sup>120</sup> David Shambaugh, "Containment or Engagement of China?: Calculating Beijing's Responses," International Security, Volume 21, Number 2, Fall 1996, p. 209.

impact of sanctions preventing the import of missile technologies is not totally effective against the missile industries. In response to this ineffectual ability, trade sanctions have been directly applied to companies that have violated the MTCR for perceived violations of China's adherence. This has been accomplished by banning computer systems and satellite launches in an attempt to show American resolve. In reply, China has in many cases simply purchased the required items from the numerous other advanced countries around the world, in addition to subverting the sanctions by using other American companies.<sup>121</sup> This lessens the severity of America's export controls and sanctions and allows them to retain their ability to manufacture. Thus, we see that the American sanctions are being circumvented by other members, as well as seeing member violations of regime adherence.

China's leadership requires economic development to maintain stability, a result of how the leadership maintains its legitimacy and mandate. This policy promotes continued technology transfers to other nations, especially with regard to the Middle East for cash, and ensuring access to oil. By the continuing transfers, these also result in continued violations against the regime.

Sales of missiles and missile technologies also provide crucial money and capital for PLA and PRC Ministries and companies. These sales provide daily sustainment, modernization, and welfare, as well as supporting in the national economy by lessening the demand from the military for government funds. This requirement for sales is leading to violations of adherence.

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<sup>121</sup> Nigel Holloway, "Playing for Keeps," Far Eastern Economic Review, February 8, 1996, pp. 14-17.

Finally, businesses also may be conducting technology transfers either without permission, or due to the fact that the government does not know. This lack of information leads to further violations of China's adherence.

Therefore, the numerous economic causes for violations of China's adherence include: a lack of bureaucratic oversight; lack of governmental budgetary control; a requirement for sales for welfare and modernization; a requirement for foreign natural resources; and a lack of international coordination among regime members.

The institution of democracy at the national level would alleviate many of these problems because the democratic institutions would allow appropriate oversight. It would allow for legitimacy issues to be handled in a regular and institutionalized manner, as well as providing for an open discussion of the national security requirements of the nation. This public discussion would lead to an appropriate allocation of national assets to the military for development and welfare purposes. This result of this discussion would reduce their need to sell weapons. In addition, the establishment of national-level democracy would rein in the corrupt elite-owned companies that use government infrastructure and assets, resulting from their status in the Communist Party.

## F. SUMMARY

The hypothesis is proven in the Chinese case, due to the fact that the Chinese domestic and international influences which favor non-adherence and non-membership would all be sufficiently minimized or curtailed with the installation of the four independent variables at the national level: legitimacy; the PLA; the extra-governmental businesses that are circumventing adherence; Taiwan; resources; and strategic

international and regional influence. Further, without the combined effect of these variables, the beneficial impact of democracy on the MTCR would not occur, given that each variable strengthens the others and enables their influence on membership.

This transition leading to adherence and membership is due to the rise of democracy, and an associated halt to missile exports. These exports would be in violation of Chinese adherence to the MTCR, due to the rule of law and to proper governance. A stronger economy would lessen the impact and need for missile transfers for economic reasons (because a more balanced and effective economy would be created). This in turn would halt the need for the PLA and other Ministries to sell missiles. The struggle for power requiring legitimacy would be lessened. In addition, the lessening of arms sales would lessen tensions with all bordering democratic states (India, Russia, Japan, Taiwan, Pakistan, Thailand). This relaxation would in turn allow easier relations with the United States. The democratization of China would also impose a lesser role on the PLA in government. This would decrease their authority to approve or conduct technology transfers, and subordinate them to civilian leadership. The democratic institutions would in essence allow China to police itself for violations.

Therefore, democracy, including its four sub-variables, is a necessary independent variable for membership in the regime.



## **IV. CONCLUSIONS**

### **A. COMPARISON OF THE CASE STUDIES**

In the cases of Brazil and the People's Republic of China, the thesis hypothesis, that democracy is a necessary condition for states to join the MTCR, has been proven. In the Brazilian case, it is due to the combined effect of the independent variables which, by definition, make up democracy, interacting with each other to make Brazil join the regime. In the Chinese case, it is proven due to the lack of the independent variables, which in turn is hindering China's ability to join the MTCR.

#### **1. Brazil**

In the Brazilian case, the effect of the democratic variables, combined with external export controls, had more of a nonproliferant impact than with export controls alone on a non-democratic nation. This is because the effect of economics and the public's desires for change, which had been influenced by the export controls, worked during the crucial election process to pressure the leadership. The choice of elected officials and ability to adhere to the MTCR were channeled through the democratic structures and pathways, facilitating Brazil's change to nonproliferation.

The economy and population's desires for economic growth, improved social conditions, cutting of federal spending, privatization, public sector reform, and growth into a regional and global power were the prime causal factors to influence this process. These accentuated the impact of the export controls to influenced the leadership.

Therefore, democracy was the critical factor that enabled the pressure on the Brazilian civilian leadership to stop proliferation and adhere to the regime.

## **2. China**

In the China case, domestic and international factors (need for legitimacy; the PLA; extra-governmental businesses that circumvent adherence; Taiwan; desire for resources; and the desire for strategic international and regional influence) favoring non-adherence and non-membership influence the PRC's decision to adhere. With the strengthening of the four independent variables (elections, governance, norms, values, and beliefs, and economic freedom), which by definition equate to democracy, all of these detractors would be sufficiently minimized or curtailed to permit adherence and membership in the regime.

Exports would be controlled or policed by rule of law and proper governance. A stronger economy would lessen the impact and need for missile transfers for economic reasons, halting PLA and other Ministries' sales. Elections would legitimize the leadership, resolving their need to export for nationalist reasons. The reduction of sales would lessen tensions with border states and the United States and curtail the need for technology transfers to offset rivals. The PLA would have decreased authority in government with democratic institutionalism.

Further, without the combined effect of these variables, democracy would not occur. By extension, without these variables, membership/adherence would not occur. Therefore, without democracy, China will not have membership in or true adherence to the regime.

### **3. Summary of findings**

Democracy, due to the effect of the independent variables, influenced and made Brazil join the MTCR. In contrast, the lack of democracy in China prevent it from joining the MTCR.<sup>122</sup> According to these conclusions and the validity of the hypothesis, with the establishment of democracy in China, it should positively influence China to join the MTCR in the future.

Further, the existence and functioning of democracy were lubricants that made the international sanctions most effective. This is because without democracy (and its four variables), the controls would not have had the intended effect of stopping proliferation and getting states to join. In the Brazil case, the impact of the sanctions acting on the elites through the desires of the people, impelled the leadership to adhere. In the China case, the impact of sanctions acting on the elites, without being transmitted through democracy, did not impact on the leadership as effectively. In actuality, the sanctions resulted in retaliatory actions from China. Thus, without democracy (as defined), the pressure from sanctions does not positively influence the leadership's decision to join the MTCR as much as with democracy.

## **B. POLICY RECOMMENDATIONS**

The current policy of “engagement and enlargement” in an attempt to spread democracy by the United States is therefore the right policy to get other technologically

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<sup>122</sup> It is also pertinent that other countries might be a democracy but may have other circumstances to make it not join the regime (i.e., India, Israel). Thus, democracy is necessary but not the only condition determining membership.

advanced nations to join the regime.<sup>123</sup> It engages the non-democratic nations to become democratic in multiple areas, never directly focusing on problem issues (arms control, human rights) enough to cause adverse relations.<sup>124</sup> In combination with this is the need to continue the buildup of institutional structures and the rule of law.<sup>125</sup> This statement is valid, since exclusively applying export controls directly on a nation to join the MTCR would not affect the role of democracy. Exclusively applying controls will neither induce the leadership to join, since they are not directly feeling the pressure of the sanctions. Only through the influence of democracy can export controls apply pressure to the leadership and induce them to “join” the Missile Technology Control Regime. This democratic transmission to the leadership is due to economic factors, the importance of civil rights, elections and civilian control of leadership, accountability for domestic spending, and institutional bureaucratic oversight of the leadership. These factors enable and positively influence a nation’s desire to join (i.e., Brazil); as opposed to applying direct sanctions or controls (without the structures, and beliefs in place to make that occur), which only negatively influence the leadership (i.e., China).

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<sup>123</sup> This is similar to the idea that engagement is only a process and a vehicle with which to get China to integrate into the existing rule-based, institutionalized, and normative international system of regimes, agreements, and treaties; in other words, engagement is the means, and integration the end. See David Shambaugh, “Containment or Engagement of China? Calculating Beijing’s Responses,” International Security, Volume 21, Number 2, Fall 1996, p. 181.

<sup>124</sup> R. W. Apple, Jr., “Clinton Concedes China Policy Hasn’t Helped Much on Rights,” New York Times, January 29, 1997, p. A6.

<sup>125</sup> This is currently being accomplished through the efforts of the International Republican Institute, an arm of the United States Republican Party. It trains Chinese citizens to monitor the elections, in addition to providing suggestions on how to conduct them. See “CHINA IN TRANSITION - Village-committee elections are regaining popularity among China’s peasants,” Far Eastern Economic Review, February 20, 1997, p. 23.

## LIST OF REFERENCES

- “Ballistic Missile Threats: National Briefings, China,” Center for Defense and International Security Studies.
- “Brazil: Exports of Major Conventional Weapons 1980-95,” SIPRI Arms Transfers Database.
- “Brazil Joins Missile Control Regime,” Reuters, 11 October 1995.
- “Brazil: Military Spending,” SIPRI Military Expenditure Database.
- “Brazil Moves to Clear Obstacles to New Space Accord With Washington,” Latin America Regional Reports: Brazil, no. Section RB-95-07, August 1995, p. 1.
- “Brazil Relishes Freedom As MTCR Member,” Space News, 30 October 1995-5 November 1995, pp. 1, 20.
- “Brazil’s Dream of Space Power Draws Near,” Los Angeles Times, 12 December 1995, p. D8.
- “Brazil Social Conditions,” Political Risk Services CD Rom Database, Syracuse, NY: International Business Communications USA, Inc., 1996.
- “Brazil to Curb Spending, Eliminate Government Jobs, Increase Tax Collection,” Reuters, 11 October 1996.
- “Brazil: Under Pressure to Give Up Missiles,” The RISK Report: Tracking Weapons of Mass Destruction, 1, no. 3, April 1995, pp. 1, 4-9.
- “Brazilian Space Program,” Information Access Company Newsletter Database, International Reports, Inc., Brazil Service: 1994.
- “China: Exports of Major Conventional Weapons 1980-95,” SIPRI Arms Transfers Database, 1996, SIPRI.
- “CHINA IN TRANSITION - Village-committee elections are regaining popularity among China’s peasants,” Far Eastern Economic Review, 20 February 1997, p. 23.
- “China Is Making Significant Efforts to Improve Armed Forces,” Reuters, 9 October 1996.
- “China, Military Spending,” SIPRI Military Expenditure Database, SIPRI.
- “China’s grassroots democracy,” The Economist, November 2, 1996, p. 33.

- "China's parliament-in-waiting," The Economist, November 2, 1996, p. 34.
- "China Progress With India on Border Issues," Reuters, 18 October 1996.
- "China Said That Japan Building Up Military, Seeking Superpower Status," Reuters, 17 October 1996.
- "China Says in Talks With Iraq to Produce Oil," Reuters, 11 November 1996.
- "Chinese Cancel Talks on Weapons Questions," New York Times, 29 May 1995, p. A2.
- "Elections In Brazil," <http://www.universal.nl/users/derksen/election/brazil.htm>.
- "Extending Missile Range," EFE (Madrid), 6 February 1991, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>.
- "Firm 'May Have' Sold Missile Technology To Iraq," Rede Globo Television (Rio De Janeiro), 3 January 1992, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>.
- "Framework Agreement Between the Government of the Federative Republic of Brazil and the Government of the United States of America on Cooperation in the Peaceful Uses of Outer Space," 1996.
- "The Global Proliferation of Theater Ballistic Missiles," Arms Control Today, 24, no. 3, April 1994, pp. 29-30.
- "Go, Go, Whoa," The Economist, December 1996.
- "Gun Running, Missile Running," Washington Post, 27 May 1996, p. A22.
- "Hearing of the U.S. House of Representatives International Relations Committee, Subject: Non-Proliferation Policy," Federal News Service, 19 June 1996.
- "How Poor Is China?" The Economist, October 1996, pp. 35-7.
- "India and Russia: Brothers in Arms," The Economist, November 1996, pp. 38, 40.
- "India to Continue Missile and Other Weapon Programs," Reuters, 15 August 1996.
- "Inventory of International Nonproliferation Organizations and Regimes," The Nonproliferation Review, Spring 1994- Fall 1994.
- "Iran Denies Buying Nerve Gas," Associated Press, 23 November 1996.
- "A Long, Hard Road," The Economist, March 1995, pp. 21-2.
- "McDonnell Douglas to Increase China Sales," Reuters, 6 November 1996.

- "Ministry States Policy," Le Quotidien De Paris, 7-8 October 1990, p. 14,  
<http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>.
- "Missile and Space Launch Capabilities of Selected Countries," The Nonproliferation Review, Fall 1993-Fall 1996.
- "Pakistan Building Factory With Chinese Help," Associated Press, 24 August 1996.
- "Pakistan Denies Purchase of Nuclear Weapons-Related Equipment From China," Reuters, 10 October 1996.
- "Pakistan Denying Building of Missile Factory With China's Help," Associated Press, 26 August 1996.
- "Pakistan Will Allow 2d Chinese Nuclear Plant," New York Times, 6 December 1996, p. A7.
- "PIRANHA-TYPE Missile Technology," VEJA (Sao Paulo), 16 May 1990,  
<http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>, p. 53.
- "The Proliferation of Delivery Systems," Technologies Underlying Weapons of Mass Destruction, Office of Technology Analysis, United States Congress, 1993, pp. 197-255.
- "U.S.-Latin America Deal Follows Brazil's Pledge," Space News, March 1996, p. 2.
- "U.S. Release Of Rocket Motor Casings Reported," O Estado De Sao Paulo, 8 September 1990, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>, p. 9.
- "U.S. Waives Objections to Russia-Brazil Missile Sale," Reuters, June 1995,  
<http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>.
- "Volume of Imports of Major Conventional Weapons into China, 1980-95," SIPRI Arms Transfers Database.
- "What is the PT, the Workers' Party of Brazil?,"  
<http://www.pt.org.br/what.htm#platform>.
- Abu-Nasr, Donna, "Congress Notified by Pentagon of Taiwan Purchases," Associated Press, 24 August 1996.
- Almond, Gabriel A. and Sidney Verba, The Civic Culture: Political Attitudes and Democracy in Five Nations, Princeton, NJ: Princeton University Press, 1963.
- Alves, Pericles Gasparini, "Brazilian Missile and Rocket Production and Export," The International Missile Bazaar: The New Suppliers' Network, Boulder, CO: Westview Press, 1994, pp. 99-128.

- Apple, Jr., R. W., "Clinton Concedes China Policy Hasn't Helped Much on Rights," New York Times, January 29, 1997, p. A6.
- Atkins, G. Pope, Latin America in the International System, Boulder, CO: Westview Press, 1995.
- Balman, Sid Jr., "CIA Sees China Missile Sales to Syria," U.P.I., 23 July 1996.
- \_\_\_\_\_, "U.S. Unsettled Over Chinese Arms Deals," U.P.I., 17 July 1996.
- Baum, Julian and Matt Forney, "Dollar Diplomacy: Beijing, Taipei Woo African States With Cash," Far Eastern Economic Review, June 1996, p. 22.
- Bedi, Rahul, "India Ignores West and Test Fires Prithvi II," Jane's Defence Weekly, February 1996, p. 12.
- Bertsch, Gary K., Richard T. Cupitt, and Steven Elliot-Gower, editors, International Cooperation on Nonproliferation Export Controls: Prospects for the 1990s and Beyond, Ann Arbor, MI: University of Michigan Press, 1994.
- Bickford, Thomas J., "The Chinese Military and Its Business Operations: The PLA As Entrepreneur," Asian Survey, XXXIV, no. 5, May 1994, pp. 460-74.
- Bitzinger, Richard A., "Arms to Go: Chinese Arms Sales to the Third World," International Security, 17, no. 2, Fall 1992, pp. 84-111.
- \_\_\_\_\_, "The Globalization of the Arms Industry: The Next Proliferation Challenge," International Security, 19, no. 2, Fall 1994, pp. 170-98.
- Bowen, Wyn, "Brazil's Accession to the MTCR," The Nonproliferation Review, Spring 1996-Summer 1996, pp. 86-91.
- \_\_\_\_\_, "WMD Technologies & Processes: Ballistic & Cruise Missiles," Workshop on Weapons of Mass Destruction (WMD) and Technical Processes (Part 1): Nuclear & Missile, Center for Nonproliferation Studies, Monterey Institute of International Studies.
- Bowen, Wyn and Andrew Koch, "Non-Proliferation Is Embraced by Brazil," Jane's Intelligence Review, 8, no. 6, June 1996, pp. 283-87.
- Bradsher, Keith, "U.S. Will Release Weapons to China," New York Times, 23 December 1992, p. A3.
- Brener, Jayme and Antonio Novaes, "Space Agency Head on U.S. Proliferation Concerns, MTCR," Isto É, 13 March 1994, p. 75.
- Camp, Roderic Ai, editor, Democracy in Latin America: Patterns and Cycles, Wilmington, DE: Scholarly Resources, Inc., 1996.

- Carasales, Julio C., "The Argentine-Brazilian Nuclear Rapprochement," The Nonproliferation Review, Spring 1995-Summer 1995.
- Cardoso, Fernando Henrique, "Space for Peace Not War," Defense News, 18 September 1995.
- Carus, W. Seth, Ballistic Missiles in Modern Conflict, New York: Praeger Publishers, 1991.
- \_\_\_\_\_, Ballistic Missiles in the Third World: Threat and Response, London: Praeger Publishers, 1990.
- \_\_\_\_\_, Cruise Missile Proliferation in the 1990's, New York: Praeger Publishers, 1992.
- Casado, Jose, "Brazil: 'Antagonistic Spirit' In Argentine Diplomacy," O Estado De Sao Paulo, 24 February 1996, p. A4.
- Center for International Security and Arms Control, Assessing Ballistic Missile Proliferation and Its Control, Stanford, CA: Stanford University, 1991.
- Chanda, Nayan, "Nervous Neighbours," Far Eastern Economic Review, February 1996, p. 15.
- \_\_\_\_\_, "Red Rockets' Glare," Far Eastern Economic Review, September 1993, pp. 10-1.
- Chellaney, Brahma, "An Indian Critique of U.S. Export Controls," Orbis, 38, no. 3, Summer 1994.
- Chow, Brian G., Emerging National Space Launch Programs: Economics and Safeguards, Santa Monica, CA: RAND, 1993.
- Christensen, Thomas F., "Chinese Realpolitik," Foreign Affairs, September 1996-October 1996, pp. 37-52.
- Clark, Mark T., "Arms Control Is Not Enough," Orbis, 40, no. 1, Winter 1996.
- Conca, Ken, "Technology, The Military, and Democracy in Brazil," Journal of Interamerican Affairs, 34, no. 1, Spring 1992.
- Cooper, Kenneth J., "Indian-Pakistani Cold War Shifts to Nuclear Matchup; Arms Race Raises Stakes in Long-Standing Rivalry," Washington Post, 5 April 1996, p. A21.
- Dahl, Robert A., "The Newer Democracies: From the Time of Triumph to the Time of Troubles," After Authoritarianism: Democracy or Disorder?, editor Daniel N. Nelson, Westport, CT: Praeger Publishers, 1995.

- \_\_\_\_\_, "Polyarchy: Participation and Opposition," New Haven, CT: Yale University Press, 1971.
- Davis, Zachary S., "China's Nonproliferation and Export Control Policies: Boom or Bust for the NPT Regime," Asian Survey, XXXV, no. 6, June 1995, pp. 587-603.
- \_\_\_\_\_, "Theory and Practice Of China's Export Controls," U.S. and Japanese Nonproliferation Export Controls: Theory, Description and Analysis, editors Gary K. Bertsch, Richard T. Cupitt, and Takehiko Yamamoto, Lanham, MD: University Press of America, 1996, pp. 221-42.
- de Gouvea Neto, Raul, "How Brazil Competes in the Global Defense Industry," Latin American Research Review, 26, no. 3, 1991, pp. 83-108.
- Denoon, David B. H. and Wendy Frieman, "China's Security Strategy: The View From Beijing, ASEAN, and Washington," Asian Survey, XXXVI, no. 4, April 1996, pp. 422-39.
- Diamond, Larry, "Is the Third Wave Over?," Journal of Democracy, 7, no. 3, July 1996.
- Diamond, Larry, editor, Political Culture and Democracy in Developing Countries, Boulder, CO: Lynne Rienner Publishers, 1994.
- Diamond, Larry, Juan J. Linz, and Seymour Martin Lipset, editors, Politics in Developing Countries: Comparing Experiences With Democracy, Boulder, CO: Lynne Rienner Publishers, 1995.
- Dickie, Mure, "U.S. Official Praises China Arms Control Efforts," Reuters, 9 September 1996.
- Ding, Arthur S., "The PRC's Military Modernization and a Security Mechanism for the Asia-Pacific," Issues and Studies, A Journal of Chinese Studies and International Affairs, 31, no. 8, August 1995, pp. 1-18.
- Dobbs, Michael, "Human Rights Issue to Be Muted in China Talks!" Washington Post, 20 November 1996, p. A27.
- Dominguez, Jorge I. and Abraham F. Lowenthal, editors, Constructing Democratic Governance: South America in the 1990s, Baltimore, MD: John Hopkins University Press, 1996
- Dreyer, June Teufel, "China's Strategic View: The Role of the People's Liberation Army," Commandant's Lecture Series, "China Into the Twenty-First Century: Strategic Partner And ... Or Peer Competitor", U.S. Army War College.
- \_\_\_\_\_, "The Military's Uncertain Politics," Current History, 95, no. 602, September 1996, pp. 254-9.

Drumond, Cosme Degenar, "VLS, Nuclear, Missile Projects Viewed," Technologia & Defesa (Sao Paulo), 3 November 1995, pp. 8-12.

Eikenberry, Karl W., Explaining and Influencing Chinese Arms Transfers, Institute for National Strategic Studies, Vol. McNair Paper 36, Washington, D.C.: National Defense University, 1995.

Erlanger, Steven, "Christopher to Go Ahead With Visit to China," New York Times, 31 October 1996.

\_\_\_\_\_, "In Beijing, Searching for a Brighter Future," New York Times, 21 November 1996, p. A7.

\_\_\_\_\_, "U.S. Warns 3 Nations Against Sale of Soviet Missile Technology," New York Times, 22 May 1996, p. A4.

\_\_\_\_\_, "U.S. Wary of New Headache With Chinese in Dispute Over Pakistan Missiles," New York Times, 27 August 1996, p. A5.

\_\_\_\_\_, "U.S. Wary of Punishing China for Missile Help to Pakistan," New York Times, 27 August 1996, p. A5.

Faison, Seth, "Asia's Giant, After Detours, Takes Familiar Growth Path," New York Times, 4 March 1997, pp. A1, C4.

\_\_\_\_\_, "Chinese Revise Criminal Code, Not Its Essence," New York Times, 7 March 1997, pp. A1, A7.

\_\_\_\_\_, "In China's Newspapers, Few Tea Leaves to Be Read," New York Times, 27 February 1997, p. A5.

Ferster, Warren, "Brazil Relishes Freedom as MTCR Member," Space News, 30 October - 5 November 1995.

\_\_\_\_\_, "China Pledges Openness," Space News, August 1996-September 1996, pp. 1, 18.

\_\_\_\_\_, "Russia Did Not Violate MTCR, Official Says," Space News, 12-18 June 1995, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>, p. 12.

Filho, José Monserrat, "The new Brazilian Space Agency: a political and legal analysis," Space Policy, May 1995.

\_\_\_\_\_, "The Place of the Missile Technology Control Regime (MTCR) in International Space Law," Space Policy, August 1994, pp. 223-8.

Findlay, Trevor, Chemical Weapons and Missile Proliferation: With Implications for the Asia/Pacific Region, Boulder, CO: Lynne Rienner Publishers, 1991.

Finnegan, Philip, "Brazil Prepares To Sign MTCR," Space News, 24-30 April 1995, pp. 3, 29.

\_\_\_\_\_, "Brazil Seeks European Help on New Launcher," Space News, March 1996, pp. 3, 21.

\_\_\_\_\_, "Foreign Technology May Cut Brazil Launch Vehicle Costs," Defense News, 11-17 March 1996, p. 26.

Forney, Matt, "Politics Vs. Profits," Far Eastern Economic Review, May 1996, p. 43.

\_\_\_\_\_, "Signs Of Struggle," Far Eastern Economic Review, February 1996, pp. 14-5.

Foster, Angus, "Brazil Eyes the Satellite Launch Market," ISLA, April 1994, p. 29.

Franko-Jones, Patrice, The Brazilian Defense Industry, Boulder, CO: Westview Press, 1992.

Friedman, Edward National Identity and Democratic Prospects in Socialist China, Armonk, NY and London: M.E. Sharpe Inc., 1995.

Frieman, Wendy, "New Members of the Club: Chinese Participation in Arms Control Regimes 1980-1995," The Nonproliferation Review, Spring 1996-Summer 1996, pp. 15-30.

Gause, Ken E., "Jiang Zemin and the PLA," Jane's Intelligence Review, 7, no. 6, pp. 277-81.

Gerth, Jeff, "U.S. Approved Equipment Sale to China Despite Hint of Misuse," New York Times, 22 November 1996, p. A7.

Gerth, Jeff and David E. Sanger, "Aircraft Deal With Chinese Is Questioned," New York Times, 30 October 1996.

Gertz, Bill, "Beijing Flouts Nuke-Sales Ban; Pakistan Again the Recipient," The Washington Times, 9 October 1996, p. A1.

\_\_\_\_\_, "China Sold Iran Missile Technology," The Washington Times, 21 November 1996.

Gilks, Anne and Gerald Segal, China and the Arms Trade, New York: St. Martin's Press, 1985.

Gill, R. Bates, The Challenge of Chinese Arms Proliferation: U.S. Policy for the 1990s, Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 1996.

- \_\_\_\_\_, "China and the Revolution in Military Affairs: Assessing Economic and Socio-Cultural Factors," Commandant's Lecture Series, "China Into the Twenty-First Century: Strategic Partner And ... Or Peer Competitor," U.S. Army War College.
- \_\_\_\_\_, Chinese Arms Transfers: Purposes, Patterns and Prospects in the New World Order, Westport, CT: Praeger Publishers, 1992.
- \_\_\_\_\_, "Curbing Beijing's Arms Sales," Orbis, 36, no. 3, Summer 1992, pp. 379-96.
- Gill, Bates and Matthew Stephenson, "Search for Common Ground: Breaking the Sino-U.S. Non-Proliferation Stalemate," Arms Control Today, 26, no. 7, September 1996, p. 17.
- Gilley, Bruce, "In the Bazaar: Concerns Mount About Rising Tide of Arms Shipments," Far Eastern Economic Review, October 1996, p. 20.
- \_\_\_\_\_, "Not Over Yet," Far Eastern Economic Review, January 1996, p. 15.
- \_\_\_\_\_, "Peace Dividend," Far Eastern Economic Review, January 1996, pp. 14-6.
- \_\_\_\_\_, "Sue You, Sue Me: Foreign Firms in China Face a Wave of Complaints," Far Eastern Economic Review, April 1996, p. 74.
- \_\_\_\_\_, "Suspicious Cargo," Far Eastern Economic Review, September 1996, pp. 15-6.
- Gilley, Bruce and Nigel Holloway, "After the Fact: Pentagon to Probe Hi-Tech Transfer to China," Far Eastern Economic Review, February 1996, pp. 15-6.
- \_\_\_\_\_, "Guns and Money: Illicit Arms Trade Puts China on the Defensive," Far Eastern Economic Review, June 1996, p. 16.
- Godwin, Paul H. B. and John J. Schulz, "Arming the Dragon for the 21st Century: China's Defense Modernization Program," Arms Control Today, 23, no. 10, December 1993, pp. 3-8.
- \_\_\_\_\_, "China and Arms Control: Transition in East Asia," Arms Control Today, 24, no. 9, November 1994, pp. 7-11.
- Goldemberg, Jose and Harold A. Feiveson, "Denuclearization in Argentina and Brazil," Arms Control Today, 24, no. 2, March 1994, pp. 10-4.
- Goodman, Anthony, "Pakistan Proposing Conference to Resolve Arms Race," Reuters, 3 October 1996.
- Gordon, Michael R., "South Asian Lands Pressed on Arms," New York Times, 23 March 1994, pp. A1, A5.

- \_\_\_\_\_, "U.S. Tries To Stop Brazil's Missile Technology Deal," New York Times, October 19, 1989, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>, p. A6.
- Graham, Clifford P., "The Technological Imperative: A Brazilian Perspective on Dual-Use Technology," Gary K. Bertsch, Richard T. Cupitt, and Steven Elliot-Gower, editors, International Cooperation on Nonproliferation Export Controls: Prospects for the 1990s and Beyond, Ann Arbor, MI: University of Michigan Press, 1994.
- Gray, Colin S., "Arms Control Does Not Control Arms," Orbis, 37, no. 3, Summer 1993.
- Gurtov, Mel, "Swords into Market Shares: China's Conversion of Military Industry to Civilian Production," The China Quarterly, 134, June 1993, pp. 213-41.
- Harkavy, Robert E. and Stephanie G. Neuman, editors, The Annals of the American Academy of Political and Social Science, The Arms Trade: Problems and Prospects in the Post-Cold War World, Vol. 5351994.
- Harvey, John R. and others, A Common-Sense Approach to High-Technology Export Controls, Stanford, CA: Center for International Security and Arms Control, Stanford University, 1995.
- Harvey, John R. and Uzi Rubin, "Controlling Ballistic Missiles: How Important? How to Do It?" Arms Control Today, 22, no. 2, March 1992, pp. 13-8.
- Held, David, "Democracy and the Global Order: From the Modern State to Cosmopolitan Governance," Stanford, CA: Stanford University Press, 1995.
- Heronema, Jennifer, "China Allows More Joint Ventures," Space News, January 1996, p. 8.
- Higley, John, and Richard Gunther, editors, Elites and Democratic Consolidation in Latin America and Southern Europe, Cambridge: Cambridge University Press, 1992.
- Holloway, Nigel, "Beating a Retreat," Far Eastern Economic Review, September 1996, p. 26.
- \_\_\_\_\_, "Called to Account: U.S. Congress Questions Hi-Tech Sales to China," Far Eastern Economic Review, March 1996, p. 22.
- \_\_\_\_\_, "Cutting Edges," Far Eastern Economic Review, February 1996, p. 16.
- \_\_\_\_\_, "Hostage to Fortune," Far Eastern Economic Review, 159, no. 46, November 1996, pp. 66-7.
- \_\_\_\_\_, "Limited Leverage: The U.S. Has Very Little Say in the Subcontinent," Far Eastern Economic Review, April 1996, p. 28.

- \_\_\_\_\_, "Muddy Waters: U.S. Attorney Starts Probe of Hi-Tech Sale to China," Far Eastern Economic Review, May 1996.
- \_\_\_\_\_, "Playing for Keeps," Far Eastern Economic Review, February 1996, pp. 14-7.
- \_\_\_\_\_, "Same Game, New Team," Far Eastern Economic Review, November 1996, pp. 18, 20.
- Holloway, Nigel and Shada Islam, "Artillery Exercises: Would U.S. Sanctions Force China to Mend Its Ways?" Far Eastern Economic Review, May 1996, p. 49.
- Holloway, Nigel and others, "Going Ballistic," Far Eastern Economic Review, June 1996, pp. 14-5.
- Hua Di, "China's Arms Proliferation in Perspective: Prospects for Change Due to Economic Reform," The Proliferation of Advanced Weaponry: Technology, Motivations, and Responses, Washington, D.C.: American Association for the Advancement of Science, 1992, pp. 123-34.
- \_\_\_\_\_, "China's Case: Ballistic Missile Proliferation," The International Missile Bazaar: The New Suppliers' Network, Boulder, CO: Westview Press, 1994, pp. 164-80.
- Hunt, Terence, "Sino-U.S. Relations Warming," Associated Press, 24 November 1996.
- Huntington, Samuel P., "The Third Wave: Democratization in the Late Twentieth Century," Norman, Oklahoma: University of Oklahoma Press, 1991.
- Husbands, Jo L., "Delivery Means & Conventional Weapons," Arms Control Toward the 21<sup>st</sup> Century, editors Jeffrey A. Larsen and Gregory J. Rattray, Boulder, CO: Lynne Rienner Publishers, 1996.
- Hutzler, Charles, "US Abetting Taiwan Separatists by Selling Stingers...," Associated Press, 27 August 1996.
- Hyer, Eric, "China's Arms Merchants: Profits in Command," The China Quarterly, no. 132, December 1992, pp. 1101-18.
- Information Office of the State Council of the People's Republic of China, China: Arms Control and Disarmament, Beijing: 1995.
- Institute for National Strategic Studies, "Arms Control," Strategic Assessment 1996: Instruments of U.S. Power, Washington, D.C.: National Defense University Press, 1996, pp. 85-96..

- Institute for National Strategic Studies, "Countering Weapons of Mass Destruction," Strategic Assessment 1996: Instruments of U.S. Power, Washington, D.C.: National Defense University Press, 1996.
- International Institute for Strategic Studies, The Military Balance, 1995-1996, London: Oxford University Press, 1995.
- Islam, Shada, "...And the Carrot: Foreign Record Companies Have a Deal for China," Far Eastern Economic Review, 159, no. 47, November 1996, pp. 84, 86.
- Jacobs, Gordon and Tim McCarthy, "China's Missile Sales - Few Changes for the Future," Jane's Intelligence Review, December 1992, pp. 559-63.
- Jing-Dong Yuan, "China's Defense Modernization: Implications for Asia-Pacific Security," Contemporary Southeast Asia, 17, no. 1, June 1995, pp. 67-84.
- Johnston, Michael and Yufan Hao, "China's Surge of Corruption," Journal of Democracy, Volume 6, Number 4, October 1995, pp. 80-94.
- Kapstein, Ethan B., "America's Arms-Trade Embargo: Lagging Sales Will Starve Lesser Suppliers," Foreign Affairs, 73, no. 3, May 1994-June 1994, pp. 13-19.
- Karatnycky, Adrian, "China Turns the Tables," New York Times, 4 December 1996, p. A23.
- Karp, Aaron, Ballistic Missile Proliferation: The Politics and Technics, Oxford: Oxford University Press, 1996.
- \_\_\_\_\_, "The Maturation of Ballistic Missile Proliferation," The International Missile Bazaar: The New Suppliers' Network, Boulder, CO: Westview Press, 1994.
- Katz, James Everett, Arms Production in Developing Countries: An Analysis of Decision Making, Washington, D.C.: Lexington Books, D.C. Heath and Company, 1984.
- Klepak, Hal, "Finding its place as region's powerhouse," Jane's Defence Weekly, 26, no. 17, 23 October 1996.
- Koubi, Vally, "Military Buildups and Arms Control Agreements," International Studies Quarterly, 38, 1994, pp. 605-20.
- Krasno, Jean, "Brazil's Secret Nuclear Program," Orbis, 38, no. 3, Summer 1994.
- Krause, Keith, Arms and the State: Patterns of Military Production and Trade, Cambridge, MA: Cambridge University, 1995.
- Krauss, Clifford, "G.O.P.'s Cohen Confirmed To Run Defense Department," New York Times, 23 January 1997, p. A10.

Kulkarni, V. G., "No War, No Peace," Far Eastern Economic Review, April 1996, pp. 18-20.

Kurtenbach, Elaine, "China works on legal system," Associated Press, 18 January 1997.

Lamouvier, Bolívar, "Brazil: Inequality Against Democracy," Larry Diamond, Juan J. Linz, and Seymour Martin Lipset, editors, Politics in Developing Countries: Comparing Experiences with Democracy, Boulder, CO: Lynne Rienner, 1995.

Laurance, Edward J., The International Arms Trade, New York: Lexington Books, 1992.

Lennox, Duncan, "China's Development of Ballistic Missiles," Jane's Intelligence Review, August 1993, pp. 374-5.

\_\_\_\_\_, "China's New Supersonic Anti-Ship Missile," Jane's Intelligence Review, November 1992, pp. 512-3.

Lewis, John Wilson and Hua Di, "China's Ballistic Missile Programs: Technologies, Strategies, Goals," International Security, 17, no. 2, Fall 1992, pp. 5-40.

Lewis, John Wilson, Hua Di, and Xue Litai, "Beijing's Defense Establishment: Solving the Arms-Export Enigma," International Security, 15, no. 4, Spring 1991, pp. 87-109.

Lewis, John Wilson and Xue Litai, China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age, Stanford, CA: Stanford University Press, 1994.

Li Daoyu, "Foreign Policy and Arms Control: The View From China," Arms Control Today, 23, no. 10, December 1993, pp. 9-11.

Lijphart, Arend, Democracy in Plural Societies: A Comparative Exploration, New Haven, MA: Yale University Press, 1977.

Lyon, Alistair, "Pakistan Wavering Over Signing of Nuclear Test Ban Treaty," Reuters, 15 August 1996.

Macartney, Jane, "China Communist Party Warning Against Western Ideas," Reuters, 13 October 1996.

Mainwaring, Scott, "Brazil: Weak Parties, Feckless Democracy," Building Democratic Institutions: Party Systems in Latin America, Stanford, CA: Stanford University Press, 1995.

Mann, Jim, "China Shifts Its Military Emphasis; Rapid Deployment Force Reflects Change in Policy," Los Angeles Times, 25 October 1988, p. 1.

\_\_\_\_\_, "China Taking First Step in Reorganizing Armed Forces," Los Angeles Times, 29 September 1985, p. 2.

\_\_\_\_\_, "U.S. Links With China's Military Raise Concerns," Los Angeles Times, 4 October 1994, p. 1.

McCarthy, Tim, A Chronology of People's Republic of China Missile Trade and Developments, International Missile Proliferation Project, Monterey, CA: Monterey Institute of International Studies, 12 February 1992.

McCarthy, Tim and Wyn Bowen, "Ballistic and Cruise Missile Technologies, Technical Processes, and the Missile Technology Control Regime," Workshop on Weapons of Mass Destruction (WMD) and Technical Processes (Part 1): Nuclear & Missile, Center for Nonproliferation Studies, Monterey Institute of International Studies.

McNamara, Thomas E., "Proliferation Dangers to U.S. Security in the Post-Cold War World," U.S. Department of State, 1996.

Morel, Benoit, "Proliferation of Missile Capability," Disarmament. A Periodic Review By the United Nations, XIV, no. 3, 1991, pp. 21-43.

Morgan, M. Granger, and Mitchel B. Wallerstein, "Controlling the High-Technology Militarization of the Developing World," W. Thomas Wander and Eric H. Arnett, editors, The Proliferation of Advanced Weaponry: Technology, Motivations, and Responses, Washington, D.C.: American Association for the Advancement of Science, 1992.

Mufson, Steven, "China Halts Missile Talks With U.S.; Beijing Delays Visits in Taiwan Visa Feud," Washington Post, 29 May 1995, p. A17.

\_\_\_\_\_, "China Sends Mixed Signals As Christopher Arrives," Washington Post, 20 November 1996, p. A21.

\_\_\_\_\_, "Jiang Seeks Credibility in U.S. Visit; Beijing Leader to Meet Clinton in New York," Washington Post, 24 October 1995, p. A13.

\_\_\_\_\_, "Losses of State-Owned Industries Pose Problems for China's Leaders," Washington Post, 3 November 1996, p. A29.

\_\_\_\_\_, "Maoism, Confucianism Blur into Nationalism," Washington Post, 19 March 1996, p. A1.

\_\_\_\_\_, "U.S. to Help China Retool Arms Plants; Perry Received As 'Old Friend' in Quest of Military Ties; Human Rights Discussed," Washington Post, 18 October 1994, p. A28.

Mussington, David, Understanding Contemporary International Arms Transfers, Adelphi Paper 291, London: International Institute for Strategic Studies, 1994.

Myers, Steven Lee, "U.S. Expects Few Changes In Relations With China," New York Times, 20 February 1997, pp. A1, A9.

Nathan, Andrew J., "China's Constitutional Option," Journal of Democracy, Volume 7, Number 4, October 1996, p. 65.

Nolan, Janne E., "Alternative Approaches to Managing Missile Proliferation," The International Missile Bazaar: The New Suppliers' Network, Boulder, CO: Westview Press, 1994.

\_\_\_\_\_, Global Engagement: Cooperation and Security in the 21st Century, Washington, D.C.: Brookings Institution, 1994.

\_\_\_\_\_, "Preventive Approaches: The MTCR Regime," Weapons of Mass Destruction: New Perspectives on Counterproliferation, Washington, D.C.: National Defense University Press, 1995, pp. 193-206.

\_\_\_\_\_, Trappings of Power: Ballistic Missiles in the Third World, Washington, D.C.: Brookings Institution, 1991.

O'Donnell, Guillermo and Philippe C. Schmitter, Transitions From Authoritarian Rule: Tentative Conclusions About Uncertain Democracies, Baltimore, MD: Johns Hopkins University Press, 1993.

O'Neill, Mark, "China Urges U.S. Action to Repair Ties; Foreign Ministry Calls Report on Missiles in Pakistan 'Groundless,'" Washington Post, 4 July 1995, p. A17.

Osava, Maria, "Brazil: Cardoso Seeks Heavy-Weight Status for His Country," Inter Press Service (Rio de Janeiro), 20 September 1995.

Ostrov, Benjamin C., "The PLA, Chinese Foreign Policy, and Asian Regionalism," Pacific Focus, X, no. 2, Fall 1995, pp. 101-24.

Otavio, Chico, "Officer Reveals Smuggling of Technology for SLV," Agencia Estado (Sao Paulo), 4 December 1995.

Ozga, Deborah A., "A Chronology of the Missile Technology Control Regime," The Nonproliferation Review, Winter 1994.

Paltiel, Jeremy T., "PLA Allegiance on Parade: Civil-Military Relations in Transition," The China Quarterly, Volume 143, September 1995, pp. 784-800.

Pearson, Frederic S., The Global Spread of Arms: Political Economy of International Security, Boulder, CO: Westview Press, 1994.

Pei, Minxin, "'Creeping Democratization' in China," Journal of Democracy, 6, no. 4, October 1995, p. 75.

Pollack, Jonathan D., "Sources of Instability and Conflict in Northeast Asia," Asia Control Today, 24, no. 9, November 1994, pp. 3-6.

Porteous, Holly, "China's View of Strategic Weapons," Jane's Intelligence Review, 8, no. 3, March 1996, pp. 132-7.

Potter, Michael, "Swords into Ploughshares: Missiles As Commercial Launchers," Space Policy, May 1991, pp. 146-50.

Potter, William C., "On Nuclear Proliferation," Security and Arms Control - Volume 2: A Guide to International Policymaking, 347, editors Edward A. Kolodziej and Morgan Patrick M., New York: Greenwood Press, 1989.

\_\_\_\_\_, "The New Nuclear Suppliers," Orbis, 36, no. 2, Spring 1994.

Potter, William C. and Harlan W. Jencks, The International Missile Bazaar: The New Suppliers' Network, Boulder, CO: Westview Press, 1994.

Przeworski, Adam, editor, Sustainable Democracy, Cambridge: Cambridge University Press, 1995.

Przeworski, Adam, Michael Alvarez, Jose Antonio Cheibub, and Fernando Limongi, "What Makes Democracy Endure?," Journal of Democracy, January 1996.

Purdum, Todd S., "Clinton and Chinese President Agree To Exchange State Visits," New York Times, 25 November 1996, pp. A1, A4.

Rashid, Ahmed, "Delhi-Bashing: Pakistani Politics Keep India Bogey Alive," Far Eastern Economic Review, April 1996, p. 26.

\_\_\_\_\_, "Flying Into Flak: Controversy Mires Major Arms Deals in Pakistan," Far Eastern Economic Review, June 1996, p. 15.

\_\_\_\_\_, "Testing Times," Far Eastern Economic Review, February 1996, p. 15.

Rashid, Ahmed and Jonathan Karp, "Most-Favoured Enemies: India and Pakistan Inch Towards Closer Trade Ties," Far Eastern Economic Review, February 1996, p. 52.

Redick, John J., "Latin America's Emerging Non-Proliferation Consensus," Arms Control Today, 24, no. 2, March 1994, pp. 3-9.

Richburg, Keith B., "China Criticizes Proposed U.S. Missile Sale to Taiwan; Beijing Warns of Strained Relations," Washington Post, 27 August 1996, p. A07.

\_\_\_\_\_, "Christopher Sets Visit to China in November; Trip Exchange Seen As Sign of Mending Ties," Washington Post, 25 July 1996, p. A25.

- Risse-Kappen, Thomas, "Public Opinion, Domestic Structure, and Foreign Policy in Liberal Democracies," World Politics, 43, July 1991.
- Roberts, Brad, Weapons Proliferation in the 1990s, Cambridge, MA: MIT Press, 1995.
- Robinson, Thomas W. and David Shambaugh, Chinese Foreign Policy: Theory and Practice, Oxford: Clarendon Press, 1995.
- Ross, Robert S., "Beijing as a Conservative Power," Foreign Affairs, 76, no. 2, March/April 1997.
- Rowen, Henry S., "The Short March: China's Road to Democracy," The National Interest, no. 45, Fall 1996, pp. 61-70.
- Roy, Ranjan, "China, India Border Pact," Associated Press, 30 November 1996.
- Russett, Bruce, Controlling the Sword: The Democratic Governance of National Security, Cambridge, MA: Harvard University Press, 1990.
- \_\_\_\_\_, Grasping the Democratic Peace: Principles for a Post-Cold War World, Princeton, NJ: Princeton University Press, 1993.
- Rustow, Dankhart, "Transitions to Democracy: Toward a Dynamic Model," Comparative Politics, 2, April 1970.
- Sanders, Ralph, Arms Industries: New Suppliers and Regional Security, Washington, D.C.: National Defense University, 1990.
- Sardenberg, Ronaldo Mota, "Official Views Issue of Sensitive Item Exports," O Globo (Rio de Janeiro), 12 July 1995, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>, p. 6.
- \_\_\_\_\_, "Strategic Affairs Secretary Discusses Duties," O Globo (Rio de Janeiro), 10 September 1995, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>, p. 6.
- Schemo, Diana Jean, "Brazil Economy Is Booming, but Some Problems Loom," New York Times, 7 September 1996.
- \_\_\_\_\_, "Local Votes in Brazil Are Test for President," New York Times, 23 August 1996.
- Schirokauer, Conrad, A Brief History of Chinese and Japanese Civilizations, Harcourt Brace Jovanovich, Publishers, 1989.
- Schneider, Ronald M., Brazil: Culture and Politics in a New Industrial Powerhouse, Boulder, CO: Westview Press, 1996.

\_\_\_\_\_, Brazil: Foreign Policy of a Future World Power, Boulder, CO: Westview Press, 1976.

Schomberg, William, "Brazil on Verge of Space Era, See Niche in Market," Reuters, 7 November 1995.

Schwam-Baird, David Michael, The Development of Brazil's Arms Exporting Industry and Its Roots in Geopolitical and National Security Doctrines, Tulane University, 1993.

Schweid, Barry, "US Warns Against Iran Arms Bid," Associated Press, 8 November 1996.

Sciolino, Elaine, "C.I.A. Report Says Chinese Sent Iran Arms Components," New York Times, 22 June 1995, p. A1.

\_\_\_\_\_, "Despite Nuclear Fears, Senate Acts to Lift Pakistan Curbs," New York Times, 22 September 1995, p. A3.

\_\_\_\_\_, "Sale of Computer to China Delayed," New York Times, 5 December 1992.

Segal, Gerald, "Cracks in China," Jane's Intelligence Review, September 1993, pp. 427-8.

\_\_\_\_\_, "China After Deng," Jane's Intelligence Review, November 1994, p. 516.

Seitz, Patrick, "Brazilians Work to Step Up Space Program," Space News, April 1995, pp. 3, 29.

Shain, Yossi and Juan J. Linz, "The Role of Interim Governments," Journal of Democracy, 3, no. 1, January 1992.

Shambaugh, David, "Containment or Engagement of China?: Calculating Beijing's Responses," International Security, 21, no. 2, Fall 1996, pp. 193-209.

Sheng Lijun, "China's 'Independent Foreign Policy,'" Pacific Focus, IX, no. 1, Spring 1994, pp. 5-45.

Shenon, Philip, "Russia Outstrips U.S. in Sales of Arms in Developing Nations," New York Times, 20 August 1996, p. A3.

Shinn, James, "Engaging China: Exploiting the Fissures in the Facade," Current History, 95, no. 602, September 1996, pp. 241-5.

Shuey, Robert D., Missile Proliferation: A Survey of Emerging Missile Forces, Washington, D.C.: Congressional Research Service, U.S. Library of Congress, 1988.

Shuey, Robert D. and others, "Brazil: Argentina, Brazil To Sign Space Accord," Gazeta Mercantil, 28 February 1996.

Shulong Chu, "The People's Republic of China Girds for Limited, High-Tech War," Orbis, 38, no. 2, Spring 1994.

Silverberg, David, "New Pacific Wariness," Armed Forces Journal International, February 1996, pp. 24-6.

Simpson, Ian, "Brazil to Meet Standards on Missile Technology," Reuters, 11 February 1994.

Sismanidis, Roxane D. V. "The Paradoxes of Asian Security: China Confronts New Challenges in a Post-Cold War World," The China Business Review, November 1995-December 1995, pp. 9-13.

Smith, R. Jeffrey, "Charges Raise Ticklish Issues for U.S. Policy; Not a Complication, State Dept. Insists," Washington Post, 24 May 1996, p. A20.

\_\_\_\_\_, "China Linked to Pakistani Missile Plant; Secret Project Could Renew Sanctions Issue," Washington Post, 25 August 1996, p. A1.

\_\_\_\_\_, "China May Cancel Proposed Sale of Nuclear Facility to Iran," Washington Post, 6 November 1996, p. A9.

\_\_\_\_\_, "Chinese Rebuff U.S. Demand; Nuclear Shipments May Spur Penalty," Washington Post, 24 March 1996, p. A1.

\_\_\_\_\_, "U.S. Waives Objection to Russian Missile Technology Sale to Brazil," Washington Post, 8 June 1995, pp. A23, A27.

Smith, Roger K., "Explaining the Non-Proliferation Regime: Anomalies for Contemporary International Relations Theory," International Organization, 41, no. 2, Spring 1987, p. 254.

Sorokin, Gerald L., "Arms, Alliances, and Security Tradeoffs in Enduring Rivalries," International Studies Quarterly, 38, 1994, pp. 421-46.

Starr, Barbara, "Impenetrable Libyan CW Plant Progresses... and Iran Poses Threat With Missile Boats," Jane's Defence Weekly, 17 April 1996, p. 3.

\_\_\_\_\_, "Iran Adds New Threat With Cruise Missile," Jane's Defence Weekly, February 1996, p. 14.

Steinberg, Gerald M., "Time for Regional Approaches?" Orbis, 38, no. 3, Summer 1994.

Stepan, Alfred, Rethinking Military Politics: Brazil and the Southern Cone, Princeton, NJ: Princeton University Press, 1988.

Stevenson, Richard W., "U.S. Trade Deficit Worsens, and Gap With China Grows," New York Times, 21 November 1996, p. A1.

Sugawara, Sandra, "With Billions in Sales at Stake, Boeing Goes to Bat for China; U.S. Companies Oppose Linking Rights to Trade Privileges," Washington Post, 7 July 1996, p. H01.

Sullivan, John D., "Democratization and Business Interests," Journal of Democracy, 5, no. 4, October 1994.

Tachinardi, Maria Helena, "Brazil: Argentina, Brazil to Sign Space Accord," Gazeta Mercantil, 28 February 1996.

Tai Ming Cheung, "Arms Reduction: The PLA's Main Weapons Dealer Goes Civilian," Far Eastern Economic Review, October 1993, p. 68.

\_\_\_\_\_, "Elusive Ploughshares: Chinese Defence Plants Turn to Civilian Production," Far Eastern Economic Review, October 1993, pp. 70-1.

\_\_\_\_\_, "Serve the People," Far Eastern Economic Review, October 1993, pp. 64-6.

Talbott, Strobe, "Democracy and the National Interest," Foreign Affairs, 75, no. 6, November/December 1996, p. 57.

Timerbaev, Roland M. and Meggen Watt, Inventory of International Nonproliferation Organizations and Regimes, 1995 Edition, Center for Nonproliferation Studies, Monterey Institute of International Studies, 1995.

Tollefson, Scott D., "Brazilian Arms Transfer, Ballistic Missiles, and Foreign Policy: The Search for Autonomy," Dissertation, Johns Hopkins University, 1991.

Tyler, Patrick E., "China Formulates Economic Plan to Thwart a Separate Taiwan," New York Times, 12 October 1996.

\_\_\_\_\_, "China Raises Nuclear Stakes on the Subcontinent," New York Times, 27 August 1996, pp. A1, A5-A6.

\_\_\_\_\_, "China Rebukes Four Other Nuclear Powers on Arms Control," New York Times, 17 November 1995, pp. A1, A14.

\_\_\_\_\_, "China's Military Stumbles Even As Its Power Grows," New York Times, 3 December 1996, p. A1.

\_\_\_\_\_, "Chinese Military's Business Empire Puts Profits into Commerce, Not Arms," New York Times, 24 May 1994, pp. A1, A6.

\_\_\_\_\_, "Clinton's Chinese Counterpart: A Weak Old Panda?" New York Times, 25 November 1996, p. A4.

\_\_\_\_\_, "Concern Over China's Tilt Toward Pakistan," New York Times, 27 August 1996.

\_\_\_\_\_, "Ethnic Strain in China's Far West Flares With Bombs and Rioting," New York Times, February 28, 1997, pp. A1, A7.

\_\_\_\_\_, "Shifting Gears, Beijing Reins in Anti-Japanese Campaign," New York Times, 19 September 1996, p. A4.

\_\_\_\_\_, "The Rebels' New Cause: Book of Yankee Bashing," New York Times, 4 September 1996, p. A4.

U.S. Arms Control and Disarmament Agency, Washington, D.C., 1994, "The Missile Technology Control Regime," <http://www.acda.gov/factshee/exptcon/mtcr96.htm>, November 6, 1996.

\_\_\_\_\_, World Military Expenditures and Arms Transfers, Washington, D.C.: U.S. Government Printing Office, 1974-1995.

U.S. Congress, Office of Technology Assessment, Global Arms Trade, Washington, D.C.: U.S. Government Printing Office, 1991.

U.S. Department of State, Bureau of Public Affairs, "Background Notes: Brazil," March 1995, <gopher://dosfan.lib.uic.edu:70/0F-1%3A22622%3ABrazil%2C%203/95>.

U.S. Department of State, "U.S. Heat Treatment of Brazilian Rocket Motors," Washington, D.C.: 24 December 1990, <http://cns.miis.edu/cgi-bin/cnsdata/abstracts.cgi>.

U.S. Office of Assistant Secretary of Defense for International Security Affairs (East Asia and Pacific Region), United States Security Strategy for the East Asia-Pacific Region, Washington, D.C.: U.S. Office of International Security Affairs, 1995, p. 20.

Valdecañas, Maria Christina, "From Machine Guns to Motorcycles," The China Business Review, November 1995-December 1995, pp. 14-8.

van Ham, Peter, Managing Non-Proliferation Regimes in the 1990s: Power, Politics, and Policies, New York: Council on Foreign Relations Press, 1994.

Wallerstein, Mitchell B., "China and Proliferation: A Path Not Taken?" Survival, 38, no. 3 Autumn 1996, pp. 58-66.

Wander, W. Thomas and Eric H. Arnett, The Proliferation of Advanced Weaponry: Technology, Motivations, and Responses, Washington, D.C.: American Association for the Advancement of Science, 1992.

Watson, Cynthia A., "Arms Control in the Late Twentieth Century: The Latin American Perspective," Arms Control Toward the 21st Century, Boulder, CO: Lynne Rienner Publishers, 1996.

Weiner, Tim, "U.S. Says It Suspects China Is Helping Pakistan With Missiles," New York Times, 26 August 1996, pp. A4, A6.

Wemple, Erik C. and E. J. Prior, "China Slips into Export Control Limbo," The China Business Review, November 1995-December 1995, pp. 26-9.

Wenguang Shao, "WMD Proliferation in Asia: A Chinese Perspective," Weapons of Mass Destruction: New Perspectives on Counterproliferation, Washington, D.C.: National Defense University Press, 1995, pp. 133-46.

Wilborn, Thomas L., Security Cooperation With China: Analysis and a Proposal, Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 1994.

Wilhelm Jr., Alfred D., "China and the Region: Facing a Decade of Challenges," Arms Control Today, 23, no. 10, December 1993, pp. 12-6.

Williams, Daniel and R. Jeffrey Smith, "U.S. to Renew Contact With Chinese Military; Meeting Reflects Strategy of Easing Tension," Washington Post, 1 November 1993, p. A1.

Witter, Willis, "U.S.-China Relations Cheered," The Washington Times, 22 November 1996-24 November 1996.

Wolfsthal, Jon Brook, "U.S. and Chinese Views on Proliferation: Trying to Bridge the Gap," The Nonproliferation Review, Fall 1994.

Wortzel, Larry M., "China Pursues Traditional Great-Power Status," Orbis, 38, no. 2 Spring 1994.

Xiao-huang Yin, "Copyright Piracy; U.S.-Sino Pact Needs Army's OK," The Phoenix Gazette, 8 June 1996, p. B9.

Xin Jun, "PLA: Training Crack Troops," Beijing Review, July 1996-August 1996, pp. 11-2.

Xinbo Wu, "China As a Cooperative Power," U.S.-Japan-P.R.C. Tripartite Relations: Foundations for a Stable Pacific Community?, Institute for National Strategic Studies, National Defense University.

Xu Xiaojun, "China's Grand Strategy for the 21st Century," Asia in the 21st Century: Evolving Strategic Priorities, Washington, D.C.: National Defense University Press, 1994, pp. 21-41.

Yan Kong, "Institutional Developments in China's Central Military Commission," Jane's Intelligence Review, September 1993, pp. 422-6.

Yanping Chen, "China's Space Commercialization Effort: Organization, Policy and Strategies," Space Policy, February 1993, pp. 45-53.

\_\_\_\_\_, "The Need for a Greater Chinese Role in Missile Non-Proliferation Issues," The Nonproliferation Review, Spring 1994-Summer 1994.

Yeng, Bai Si, "Understanding the Chinese defence industry," Military Technology, March 1987, pp. 36-54.

Yu, Peter Kien-hong, "China's 'One Army, Two Systems,'" Jane's Intelligence Review April 1993, pp. 186-9.

Yuhuda, Michael, Towards the End of Isolationism: China's Foreign Policy After Mao, London: Macmillian Press, 1983.

Zhuang Maocheng, "Proliferation of Ballistic Missiles and Regional Security," Disarmament. A Periodic Review By the United Nations, XIV, no. 3, 1991, pp. 44-59.



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